

# COTTONWOOD HEIGHTS

## ORDINANCE NO. 128

### AN ORDINANCE ADOPTING AND CODIFYING NEW TITLE 17 ("STORM DRAINAGE AND FLOOD CONTROL DEVELOPMENT; GROUND WATER SOURCE PROTECTION") OF THE COTTONWOOD HEIGHTS CODE OF ORDINANCES

**WHEREAS**, effective 14 January 2005, the city council (the "*Council*") of the city of Cottonwood Heights (the "*City*") adopted a code of ordinances (the "*Code*") for the City; and

**WHEREAS**, following adoption of the Code, the Council has determined that further regulation of storm drainage and flood control development, groundwater source protection and related matters in the City is warranted; and

**WHEREAS**, the Council met in regular session on 18 November 2008 to consider, among other things, modifying the Code to adopt and codify as part of the Code new Title 17, entitled "Storm Drainage and Flood Control Development; Ground Water Source Protection" ("*Title 17*"); and

**WHEREAS**, the City's community development director and the City engineer have recommended that the Council adopt and codify as part of the Code new Title 17; and

**WHEREAS**, after careful consideration of the recommendations of the City's community development director, the City engineer, and the requirements of federal and state law, the Council has determined that it is in the best interest of the health, safety and welfare of the citizens of the City to amend the Code by adopting and codifying new Title 17 as proposed;

**NOW, THEREFORE, BE IT ORDAINED** by the city council of the city of Cottonwood Heights as follows:

Section 1. **Adoption and Codification of Title 17.** The Council hereby approves and adopts Title 17 in the form attached hereto, and hereby codifies the same as Title 17 of the Code; provided, however, that the city attorney, with such assistance as he may require from other city officers and staff, is authorized and directed without further council action to make such additional formatting and technical corrections to Title 17 as he may consider to be appropriate in connection with inclusion of Title 17 in the Code.

Section 2. **Action of Officers.** All actions of the officers, agents and employees of the City that are in conformity with the purpose and intent of this ordinance (this "*Ordinance*"), whether taken before or after the adoption hereof, are hereby ratified, confirmed and approved.

Section 3. **Severability.** It is hereby declared that all parts of this Ordinance are severable, and if any section, paragraph, clause or provision of this Ordinance shall, for any reason, be held to be invalid or unenforceable, the invalidity or unenforceability of any such section, paragraph, clause or provision shall not affect the remaining sections, paragraphs, clauses or provisions of this Ordinance.

Section 4. **Repealer.** All ordinances or parts thereof in conflict with this Ordinance are, to the extent of such conflict, hereby repealed.

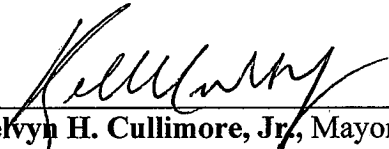
Section 5. **Effective Date.** This Ordinance, assigned no. 128, shall take immediate effect as soon as it shall be published or posted as required by law and deposited and recorded in the office of the City's recorder, or such later date as may be required by Utah statute.

**PASSED AND APPROVED** this 18<sup>th</sup> day of November 2008.

**COTTONWOOD HEIGHTS CITY COUNCIL**



  
Linda W. Dunlavy, Recorder

By   
Kelvyn H. Cullimore, Jr., Mayor

**VOTING:**

Kelvyn H. Cullimore, Jr.	Yea <input checked="" type="checkbox"/>	Nay <input type="checkbox"/>
Gordon M. Thomas	Yea <input checked="" type="checkbox"/>	Nay <input type="checkbox"/>
J. Scott Bracken	Yea <input checked="" type="checkbox"/>	Nay <input type="checkbox"/>
Don J. Antczak	Yea <input checked="" type="checkbox"/>	Nay <input type="checkbox"/>
Bruce T. Jones	Yea <input checked="" type="checkbox"/>	Nay <input type="checkbox"/>

**DEPOSITED** in the Recorder's office this 18<sup>th</sup> day of November 2008.

**POSTED** this 19 day of November 2008.

WST\CH\514047.1

**Title 17**

**STORM DRAINAGE AND  
FLOOD CONTROL DEVELOPMENT;  
GROUNDWATER SOURCE PROTECTION**

**Chapters:**

- 17.02 Administration**
- 17.04 General Provisions**
- 17.08 Drainage of Subsurface Water**
- 17.12 City Drainage System**
- 17.16 Private Construction of Public Facilities**
- 17.24 Detention Plans**
- 17.25 Storm Water Pollution Prevention Plans**
- 17.26 Erosion Control Plans**
- 17.27 Storm Drainage Systems**
- 17.28 Storm Water Facilities and Impact Fees**
- 17.30 Groundwater Source Protection**
- 17.32 Flood Damage Prevention**
- 17.34 Violations and Penalties**



## **Chapter 17.02**

### **ADMINISTRATION**

#### **Sections:**

#### **17.02.010 Administration generally; Appeals.**

#### **17.02.010 Administration generally; Appeals.**

The city's community development department shall be responsible for the administration and regulations provided for in this title. Subject to the requirements of section 17.28.080 regarding appeals concerning the payment of impact fees, any person may appeal any decision of the department under the terms of this title to the city manager. The city manager may appoint a hearing officer with respect to such matter. The hearing officer shall hear the matter and prepare and submit written findings of fact and his recommendation regarding the matter to the city manager. Upon receiving the hearing officer's findings of fact and recommendation, the city manager shall enter an order sustaining, reversing, modifying or remanding the matter for further resolution.

## Chapter 17.04

### GENERAL PROVISIONS

#### Sections:

- 17.04.010 Purpose.**
- 17.04.020 Definitions.**
- 17.04.030 Applicability.**
- 17.04.040 Owner and city responsibility.**
- 17.04.050 Delineation of drainage basins and areas.**
- 17.04.060 Engineering studies of drainage areas.**
- 17.04.070 Control of development excess waters.**

#### **17.04.010 Purpose.**

A purpose of this title is to establish and provide means, rules and regulations for the control and discharge of flood waters or excess waters caused by the construction of improvements upon real property located in the city.

#### **17.04.020 Definitions.**

Unless the context requires otherwise, the following terms shall have the following meanings:

A. "Accelerated soil erosion" means the increased migration and movement of soils on all land surfaces that occur as a result of human activities.

B. "Base flood" means a flood having a one percent chance of being equaled or exceeded in any given year.

C. "Best management practices" or "BMPs" means the schedule of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of waters of the state. BMPs also include treatment, operating procedures and practices to control site runoff, spillage or leaks, waste disposal or

drainage from material storage. BMPs include both structural and nonstructural control.

D. "Building permit" means all permits except those issued solely for grading or for the purpose of remodeling or repairing any preexisting building or structure, provided that no increase in impervious surface on the property results from such permit.

E. "County" means Salt Lake County.

F. "County facilities" means the following water courses and related facilities, including their open channel sections and sections in conduit:

- (1) Jordan River;
- (2) Big Cottonwood Creek; and
- (3) Little Cottonwood Creek.

G. "Design capacity" or "capacity of drainage systems" means the maximum volume of water per unit of time which can be carried or accommodated by each component of a drainage system, based upon size of the line, slope and any other factors which affect the carrying capacity of a line, or, in the case of detention and retention facilities, the maximum amount of volume that can be stored in the facility.

H. "Developer" means any Person who alters, improves, constructs upon, or in any way physically impacts any real property in the City that is subject to a storm water pollution prevention plan under this title, whether or not the developer owns the subject real property.

I. "Development," "development site" or "subdivision" means the total area of a subdivision or the total area of the parcel of land on which a building permit is to be issued or the total area of property being improved, including yard space in the case of development of a part of land parcel.

J. "Department" means the city's community development department or its designee.

K. "Detention" means temporary accumulation of excess waters and/or other

storm waters, and shall include the total or partial accumulation of such waters. In the case of detention the detention facilities shall include carriage of the released storm water to an intermediate or major drainage system facility, trunk line, natural tributary or final destination. Also, in the case of detention, the detention facilities shall include provision for safely routing overflow in the event that the amount of storm water exceeds the design capacity of the detention facility.

L. "Director" means the director of the city's community development department.

M. "Drainage area" means that portion of a drainage basin whose drainage or storm waters drain or gravitate toward a natural or artificial channel, conduit, retention or detention area; upon designation of a drainage area on a map referred to in section 17.04.050, "drainage area" shall mean the area so designated.

N. "Drainage system" means all facilities used to conduct excess waters to, through and from a drainage area to the point of final detention or destination, including, but not limited to, any or all of the following: pipes, conduits, culverts, curbs, gutters, waterways, inlets, swales, ditches, gulches, channels, retention and detention areas, and appurtenant features, as well as easements and rights-of-way necessary to accommodate the same. In ascending order of size and capacity, components of the drainage system include the following: Unit drainage system, intermediate drainage system, major drainage system, trunk line, natural tributary, final destination. A drainage system may, but need not, contain all of the foregoing components.

O. "Earth disturbance" means a man-made change in the natural cover or topography of land, including all grading, cut and fill, building, paving, landscaping and other activities which may result in, or contribute to, soil erosion or sedimentation of storm waters.

P. "Erosion" means the process by which the ground surface is worn away by action of wind, water, gravity or any other natural means.

Q. "Excavation" means any act by which soil rock is cut into, dug, quarried, uncovered, removed, displaced, relocated or stockpiled, including all conditions resulting from such activities.

R. "Excess waters" means those waters flowing on or across a lot, subdivision, development or other area of real property which are created because of alteration of, or building on, the natural terrain or other increase in the impervious surface of the property, which waters are additional to the waters which would flow on or across the unaltered natural terrain.

S. "Filling" means any act by which soil, rock or other construction materials are placed, stockpiled and/or dumped onto the surface of the each in a manner that may result in exposure of such materials to rain, snow, wind or other elements.

T. "Final destination" means a natural or artificial retention area which serves one or more drainage basins into which excess waters are discharged, without subsequent discharge into any other drainage system, facility or retention or detention area or facility.

U. "FIRM" or "Flood Insurance Study for Salt Lake County and Incorporated Areas" means a scientific and engineering report issued by the Federal Emergency Management Agency, effective September 21, 2001, and an accompanying Flood Insurance Rate Map.

V. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland waters; and/or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

W. "Floodway" means the channel of a river or other watercourse and the adjacent

land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

X. "Grading" means any stripping, excavation, filling, stockpiling or similar disturbance of real property, including such property in its excavated or filled condition.

Y. "Guidance document" or "city's guidance document" means the city's manual entitled "Guidance Document for Storm Water Management, 2008," including any amendments, successors or replacements.

Z. "Intermediate drainage system facility" means that part of the drainage system which serves one or more single units, subdivision or development drainage system facilities, which conveys excess waters from a unit or subdivision, and which is tributary to a major drainage system facility, a trunk line, natural tributary or final destination. Facilities within this system will be designed to fully accommodate a ten-year frequency flood.

AA. "Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is built in compliance with all applicable non-elevation design requirements of this title.

BB. "Major drainage system facility" means that part of the drainage system within a drainage area which is contributed to by one or more unit and intermediate drainage systems. A major drainage system facility is tributary to a trunk line, natural tributary or final destination.

CC. "Manager" means the city's manager or the manager's designee.

DD. "Municipal separate storm sewer" means a conveyance or system of conveyances (including but not limited to, roads with

drainage systems, city streets, catch basins, curbs, gutters, ditches, man-made channels and/or storm drains) designed or used for collecting or conveying storm waters.

EE. "Natural tributary" means that part of the drainage system contributed to by one or more trunk lines, major, intermediate and unit drainage systems that is a natural channel or river which is a tributary solely to a final destination.

FF. "New construction" means structures for which the start of construction commenced on or after the date of initial adoption of this title, which is 18 November 2008, and includes any subsequent alterations to such structures.

GG. "One-hundred year frequency flood" means a flood flow of the magnitude which is expected to occur on the average of a one-hundred-year frequency or has a one-percent chance of being equaled or exceeded during any one year. Frequency flood quantities shall be determined using NOAA IDF Curve – Cottonwood Weir, Utah (42-1759) from NOAA Atlas 14. Similarly, two, five, ten and other year frequency floods bear like definition.

HH. "Permanent soil erosion control measures" means those control measures which are installed or constructed on real property to control erosion, and which are maintained after completion of all grading and earth disturbance activities.

II. "Pollutant" means any dirt, slurry, solid waste, construction debris, garbage, trash, rock, sand and any industrial, municipal or agricultural waste.

JJ. "Private drainage system facility" means that drainage system which drains privately-owned property, and is tributary to a unit, intermediate or major drainage system facility, county facility, natural tributary or final destination.

KK. "Retention" means the permanent accumulation of excess waters and/or other



storm waters, and shall include the total accumulation of such waters.

LL. "Sediment" means solid material settled from suspension in a liquid. "Sedimentation" is the deposition or accumulation of such sediment.

MM. "Special flood hazard areas" means those areas identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for Salt Lake County and Incorporated Areas," including any amendments, successors and replacements.

NN. "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided that the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. "Actual start" means the first placement of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. "Start of construction" does not include (1) land preparation such as clearing, grading and filling; (2) the installation of streets and/or walkways; (3) excavation for a basement, footings, piers, or foundations or the erection of temporary forms; or (4) the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, "actual start of construction" means the first alteration of any wall, ceiling, floor or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

OO. "Storm waters" means a storm or flood flow as a result of precipitation or snowmelt runoff of the magnitude which is expected to occur on the average of a 2-year

frequency or has a ten percent chance of being equaled or exceeded during any one year.

PP. "Stripping" means any activity which removes or significantly disturbs the vegetative surface cover of land, including, without limitation, clearing and grubbing operations.

QQ. "Structure" means a walled and roofed building or manufactured home that is principally above ground.

RR. "Subdivision" means any land that is divided, re-subdivided or proposed to be divided into two or more lots, parcels, sites, units, plots or other division of land for the purpose, whether immediate or future, for offer, sale, lease, or development either on the installment plan or upon any and all other plans, terms and conditions.

SS. "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.

TT. "Substantial improvement" means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. This term includes structures which have incurred substantial damage, regardless of the actual repair work performed. This term does not, however, include either:

(1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that has been identified by the local code enforcement official and which is the minimum necessary to assure safe living conditions; or

(2) Any alteration of a designated historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

UU. "Suspended sediment" means the very fine soil particles that remain in suspension in water for a considerable period of time without contact with the solid fluid boundary at or near the bottom. They are maintained in suspension by the upward components of turbulent currents.

VV. "Trunk line" means that part of the drainage system contributed to by one or more drainage areas and unit, intermediate and major drainage system facilities within such drainage areas. A trunk line transports excess waters to a natural tributary or final destination.

WW. "Unit or subdivision drainage system facilities" means that drainage system which drains a subdivision or other development area and which is tributary to an intermediate or major drainage system facility, major drainage system facility, trunk line, natural tributary or final destination.

XX. "UPDES" means the Utah Pollution Discharge Elimination System.

YY. "Unit drainage system facility" means that drainage system which drains a subdivision or other individual development area, and which is tributary to an intermediate or major drainage system facility.

#### **17.04.030 Applicability.**

This title shall apply to all portions of the city drainage system constructed or completed from and after the effective date of this title.

#### **17.04.040 Owner and city responsibility.**

A. It is the responsibility and obligation of the owner of real property to control and contain or discharge into a drainage system facility, excess storm waters and to reduce pollutants in storm runoff generated upon real property in the city, in accordance with this title. An owner's responsibility includes:

(1) Construction and maintenance of private and unit drainage system facilities at the owner's expense.

(2) Preparation of and compliance with a city-approved storm water pollution prevention plan for all new developments and redevelopment projects.

(3) Payment of impact fees or, in lieu thereof, construction of intermediate and/or major drainage system facilities.

B. The city shall maintain unit, intermediate and major drainage system facilities dedicated to and accepted by the city. The owner of real property shall maintain a unit, intermediate and major drainage system facilities that are not dedicated to and accepted by the city. Additionally, the city may, but is not obligated to, construct intermediate and/or major drainage system facilities. The city council, through its budget process, including review of amounts received pursuant to the city impact fees, may establish priority and determine each year which facilities will be constructed by the city.

#### **17.04.050 Delineation of drainage basins and drainage areas.**

Studies and maps showing the boundaries of drainage basins and drainage areas made by the city or others acceptable to the city shall be considered in whole or in part if applicable.

#### **17.04.060 Engineering studies.**

A. Subject to staff or budget contracts, the department shall cause engineering studies to be made of all drainage areas within the city. These studies shall be made to determine the amount or volume, frequency and course of excess and storm waters, and any drainage system now provided or to be provided for the drainage and control of outfall or disposal points. Previous studies made by the city or others shall be considered in whole or in part if applicable.

B. These studies shall, from time to time, be updated or amended as necessary to reflect changed conditions. Studies in individual drainage areas, developments, proposed subdivisions, existing subdivisions or other property may be completed by professional engineers for private developers under the direction of the city if the city cannot complete the studies as soon as required for development due to staff or budget constraints.

C. In conducting the studies referred to herein, the analysis of storm drainage flows and facilities shall be performed by professional engineers, acceptable to the city, competent in hydrology and hydraulics and shall be in accordance with sound engineering practices. Location of existing storm drainage facilities will be coordinated with the department.

D. In all cases, flows shall be based on present conditions and potential for future development, taking into consideration the current elements of the land use general plan of the city, relating to the drainage area and other relevant factors, including changes in zoning or development which are not reflected on the general plan.

drainage area within which the development is located.

B. A detention facility, when determined applicable by the department, for the controlled release of excess water into unit drainage facilities, intermediate and major drainage facilities, trunk lines, natural tributaries or final destination. The maximum allowable release rate from these detention facilities shall be no greater than .2 cubic feet per second per developed acre outside of a sensitive lands overlay zone, and 0.1 cubic feet per second per developed acre within a sensitive lands overlay zone.

#### **17.04.070 Control of development excess waters.**

Subject to the city's regulatory and approval functions specified in this title, the owner or developer of land to be improved or developed shall provide, at his own expense, the unit or subdivision drainage system facilities within each development necessary for the control of excess waters within the development. The developer also shall provide at his own expense:

A. The intermediate and/or major drainage system facilities required to convey such excess waters to a trunk line, natural tributary or final destination as may be indicated on the drainage area map for the

## Chapter 17.08

### DRAINAGE OF SUBSURFACE WATER

#### Sections:

**17.08.010 Written permission required.**

**17.08.020 Minimum standards.**

#### **17.08.010 Written permission required.**

It is unlawful for any person to make any improvements in the city where subsurface water exists within two feet of the foundation level of the improvements without obtaining the written permission of the director of community development. This requirement shall include, without limitation, subdividers, persons developing ground for industrial and/or commercial purposes, and homeowners constructing improvements upon their own property.

#### **17.08.020 Minimum standards.**

Before written permission is issued, the director of community development shall insure that the following requirements are met:

A. Test holes shall be dug upon the properties to a depth sufficient to determine the extent of the subsurface water table in the proposed development to include the depth thereof and any other information regarding same which may be required by the city.

B. A comprehensive soil report shall be submitted for review by the city. The soils report shall (1) define the porosity of the soil and the high and low levels of the water table in the proposed area, and (2) contain an examination of the water table during the period from April through June, or any other time high water table may occur as determined by the city. All examinations of the property upon which the soils report is based shall have been made within a reasonable time prior to the date of the report.

C. All footings shall be at least two feet above the highest water table elevations, and

the type of house construction or other development shall be governed by this standard, or by a satisfactory design approved by a professional engineer which shall be submitted to the director of community development for approval.

D. In areas where soil conservation maps indicate high water tables, as defined in section 17.08.010, and in all other questionable areas that might be designated as high water tables by the director, no building permits will be issued without water table inspection during high water table season by a representative of the city or a review of similar inspections of other properties in the same designated area.

E. The developer shall provide drainage easements to the city along all rear, side and front lot lines for drainage purposes whenever required to accommodate subsurface drainage facilities that are constructed in order to lower groundwater levels. The size of the easement shall be determined by the director and shall in all events be a minimum of ten feet. The director shall recommend whether the drainage easements shall be separate from other utility easements or shall be used concurrently with such easements.

F. All grading of any kind shall be done so as to insure that the drainage is away from the proposed improvements and in such a manner as to prevent any conveying or trapping of water adjacent to the basement and foundation walls of the improvement.

G. Based on the soils report submitted to the city as required by this chapter and any other relevant information available to the city, building designs that include basements or below-grade structures may be prohibited. In such locations, structures shall be built above-grade at a point where rising water tables or runoff cannot affect the proposed structure, or upon the recommendations of a professional geotechnical or drainage engineer a subsurface drainage system or proper

waterproofing with consideration given to floating may be installed to protect the structure. Subsurface drainage systems shall be subject to city's approval.

H. Nothing in this title shall preempt the authority of the city engineer to require soils reports, foundation investigations or any other requirements for individual building sites and/or as required by the International Building Code, including all amendments, successors and replacements.

## Chapter 17.12

### CITY DRAINAGE SYSTEM

#### Sections:

- 17.12.010 **Generally.**
- 17.12.020 **Studies of needed drainage facilities.**
- 17.12.030 **Design criteria.**
- 17.12.040 **Map requirements.**
- 17.12.050 **Responsibility of owner or developer.**
- 17.12.060 **Plans and specifications required.**
- 17.12.070 **Temporary facilities permitted when.**
- 17.12.080 **Connection to city facility required.**
- 17.12.090 **Facilities to become property of city.**

#### 17.12.010 **Generally.**

The provisions of this chapter apply where the city installs, at its expense, intermediate or major drainage system facilities to which intermediate or unit drainage system facilities of a subdivision or development are connected.

#### 17.12.020 **Studies of needed drainage facilities.**

A. In connection with the studies contemplated under section 17.04.060, the department may designate areas where the studies shall determine the intermediate and major drainage system facilities to be provided for the drainage and control of excess waters within the areas and to convey such waters to acceptable trunk lines, natural tributaries or final destinations. Previous studies made by the city or others shall be considered in whole or in part, if applicable.

B. These studies shall include drainage area identification, total drainage area, total area outfall flow and rainfall intensity. These

studies shall also include a current estimate of the cost of providing the intermediate and major drainage system facilities, and the computation of such costs shall include the expense of the studies as well as anticipated engineering design services, construction engineering and inspection services, land acquisition and incidental costs required to install such facilities.

#### 17.12.030 **Design criteria.**

A. In conducting the studies referred to in section 17.12.020, the analysis and design of storm drainage flows and facilities shall be performed by professional engineers, acceptable to the city, competent in hydrology and hydraulics and shall be in accordance with sound engineering practices.

B. In developing the studies, every effort shall be made to promote economy in the proposed drainage design by selection of facilities for accommodating drainage flow and the use of materials and methods of construction that provide the most advantageous balance between the cost of the facilities and the benefits received therefrom. Innovative approaches that reduce the overall requirement or cost of capital construction shall be encouraged.

C. In all cases, flows shall be based on present conditions and potential for future development, taking into consideration the city's land use general plan (including changes in zoning or development which are not reflected on the general plan) and other relevant factors.

#### 17.12.040 **Map requirements.**

As studies and maps for individual drainage areas are completed in accordance with sections 17.04.050 and 17.04.060 in areas where the city may construct intermediate or major drainage system facilities, the necessary major drainage system facilities and intermediate drainage system

facilities, together with the design capacity thereof; shall be shown on the map or maps. The map or maps shall be approved by the department and shall serve as designations of the respective drainage area boundaries and the drainage system requirements within the area. The map or maps may be subject to revision from time to time to conform with existing conditions, the results of additional studies and such other information as may be obtained from time to time. The map or maps from the studies shall be provided to the department in both paper and digital format for incorporation into the city's graphical information system.

**17.12.050 Responsibility of owner or developer.**

A. The owner or developer of real property to be improved or developed shall provide, at its expense, the unit or subdivision drainage system facilities within each development necessary for the drainage and control of excess waters within the development consistent with the provisions of section 17.04.070.

B. The city may undertake the construction of the intermediate or major drainage system facilities required to convey any drainage waters to a trunk line, natural tributary or final destination within or at the boundary of the drainage area, as may be indicated on the drainage area map for the drainage area within which the development is located.

C. The developer or owner shall be responsible for the payment of a unit area drainage fee, specified in chapter 17.16, which shall be applied toward the payment of all or part of the cost of the intermediate or major drainage system facilities constructed by the developer or to be constructed by the city in the area in which the development is located. In those cases where the development in question is traversed by or adjacent to

intermediate or major drainage system facilities, the unit area drainage fees may be applied toward the construction of such facilities as provided in this title. If a study of the drainage area has not been completed as outlined in section 17.12.020 then the developer shall be required to perform a study of the needed drainage facilities for the drainage area where the development is proposed. The department reserves the right to waive the requirement of the drainage area study if the development size has been determined to be an insignificant impact to the drainage area. In the case where no study has been performed or will be required, payment of the drainage fee by the development is not required.

**17.12.060 Plans and specifications required.**

A. Prior to the final approval of a subdivision or development plan or building permit associated with a subdivision or development plan, or in the case of a single lot development, a single building permit, the owner or developer shall, at his expense, have prepared by a professional engineer, acceptable to the city, detailed plans and specifications for the construction and installation of all unit or subdivision drainage facilities for the control and drainage of excess water within the development, or the part thereof, and the carriage of such water to an acceptable intermediate or major drainage system facility or to a trunk line, natural tributary, a final destination as agreed to by the department, all in conformance with the master plan of the drainage area or drainage basin as approved by the city, together with the estimated total cost of these facilities.

B. In lieu of completion of the drainage system prior to final approval of the subdivision or development plan by the city, the developer or owner shall provide an acceptable assurance to the city that the

drainage system will be constructed and installed as indicate and approved. Acceptable assurance shall consist of any one of the types of performance guaranties described in section 17.16.130.

C. Upon completion of review and approval by the department, the subdivision or development plan or building permit may be given final approval; provided however, that a building for a single- or two-family dwelling may be given final approval only if installation of the drainage facilities is complete, or if the owner or developer gives acceptable assurance to the city that the drainage facilities will be constructed and installed as indicated and approved. Acceptable assurance shall consist of any one of the types of performance guaranties described in section 17.16.130.

**17.12.070 Temporary facilities permitted when.**

A. The department may approve temporary drainage solutions providing for on-site detention or retention that will allow development to continue pending completion of the intermediate or major drainage system. The temporary solutions shall provide the same level of flood protection at all times that will be provided by the completed systems. All costs of temporary solutions shall be paid by the developer in addition to any other applicable costs and fees.

B. The department shall make the determination of the required scope of temporary facilities or improvements prior to the issuance of any permit or approval of a final plat or development plan, whichever first occurs.

**17.12.080 Connection to city facility required.**

Duplicate intermediate or major drainage facilities shall not be allowed. Subject to approval by the department, all unit or intermediate drainage facilities shall connect

to existing drainage facilities. All applicable fees shall be paid prior to any such connection.

**17.12.090 Facilities to become property of city.**

All unit or subdivision, intermediate or major drainage system facilities and appurtenances constructed or provided under this title shall, upon written acceptance by the city, become the property of the city and the city shall thereafter operate and maintain the same. Written acceptance shall be given if the unit or subdivision, intermediate or major drainage system facilities are constructed within the provisions of this title; provided, however, that temporary or permanent retention or detention areas may be retained by the owner or developer thereof, and such retention or detention areas may upon city approval, but need not, be conveyed or dedicated to the city.



## Chapter 17.16

### PRIVATE CONSTRUCTION OF PUBLIC FACILITIES

#### Sections:

- 17.16.010 Generally.**
- 17.16.020 Removal of property from benefited area.**
- 17.16.030 Studies of needed facilities.**
- 17.16.040 Design criteria.**
- 17.16.050 Map requirements.**
- 17.16.060 Design of facilities.**
- 17.16.070 Acquisition of easements and rights-of-way.**
- 17.16.080 Construction of facilities.**
- 17.16.090 Inspection by department.**
- 17.16.100 Temporary facilities permitted when.**
- 17.16.110 Connection to facility required.**
- 17.16.120 Performance guaranties.**

#### **17.16.010 Generally.**

The city acknowledges that a private owner or developer of property may construct intermediate or major drainage system facilities that may be used by owners or developers of other property. The provisions of this chapter detail the manner in which such facilities may be constructed by a private owner or developer and the manner and cost of connection of such system by another owner or developer.

#### **17.16.020 Removal of property from benefited area.**

Upon written request from the owner of any real property to have his real property excluded from a drainage system on (1) showing that such real property can be developed in a manner consistent with the detention plan designated in chapter 17.24, and (2) submitting written election acceptable to the city in recordable form that the owner

shall not make alterations or improvements that will result in excess waters from storm or flood draining into the drainage system, and that such election is binding on successors and assigns, the owner's property shall be excluded by the city from the drainage system benefited area. Requests for exclusion from the benefited area shall be considered until final plans and specifications are approved by the department pursuant to section 17.16.060 or 60 days prior to the letting of bids for the construction of the intermediate and/or major drainage system facilities to be constructed by an owner or developer, whichever is later. Unless excluded, all real property within the drainage system benefited area will be subject to payment of applicable fees as a condition precedent to issuance of a building permit or construction of any improvements upon the real property.

#### **17.16.030 Studies of needed facilities.**

A. In connection with the studies contemplated under section 17.04.060 and 17.12.060, the department may designate areas where the studies shall determine the intermediate or major drainage system facilities to be provided for the drainage and control of excess waters within the areas and to convey such waters to acceptable trunk lines, natural tributaries or final destinations. Previous studies made by the city or others shall be considered in whole or in part, if applicable.

B. These studies shall include drainage area identification, total drainage area, total area outfall flow and rainfall intensity. These studies shall also include a current estimate of the cost of providing an intermediate or major drainage system facilities, and the computation of costs shall include the expense of the studies as well as anticipated engineering design services, construction engineering and inspection services, land acquisition and incidental costs required to

install the facilities. These studies may, from time to time, be updated or amended as necessary to reflect changed conditions. Studies in individual drainage areas, developments, proposed subdivisions, existing subdivisions or other property shall be completed by professional engineers acceptable to the city for private developers under the direction of the city if the city cannot complete the studies as soon as required for development due to staff or budget constraints.

**17.16.040 Design criteria.**

A. In conducting the studies referred to in section 17.16.030, the analysis and design of storm drainage flows and facilities shall be performed by professional engineers, acceptable to the city, competent in hydrology and hydraulics and shall be in accordance with sound engineering practices.

B. In developing the studies, every effort shall be made to promote economy in the proposed drainage design by selection of facilities for accommodating drainage flow and use of materials and methods of construction which provide the most advantageous balance between the cost of the facilities and the benefits received therefrom. Innovative approaches that reduce the overall requirement or cost of capital construction shall be encouraged.

C. In all cases, flows shall be based upon conditions of future development of the city, taking into consideration the general plan of the city relating to the drainage area and other relevant factors, including changes in zoning or development that are not reflected on the general plan.

**17.16.050 Map requirements.**

As studies and maps for individual drainage areas are completed in accordance with sections 17.04.050 and 17.04.060 in areas where a private developer may construct

an intermediate or major drainage system facilities to be used by others, the necessary major drainage system facilities and an intermediate drainage system facilities, together with the design capacity thereof, shall be shown on the map or maps. The map or maps shall be approved by the department and shall serve as designations of the respective drainage area boundaries and the drainage system requirements within the area. The map or maps may be subject to revision from time to time to conform with existing conditions, the results of additional studies and such other information as may be obtained from time to time. The map or maps shall be provided to the department in both paper and digital format for incorporation into the city's graphical information system.

**17.16.060 Design of facilities.**

The owner or developer shall have the intermediate or major drainage system facilities designed by professional engineers acceptable to the city to accommodate the excess waters within the drainage system benefited area. The plans and specifications shall be submitted to the department for review and, if acceptable, approval.

**17.16.070 Acquisition of easements and rights-of-way.**

A. Easements or rights-of-way or property that must be acquired for the installation of the intermediate or major drainage system facility shall be provided by the owner or developer, at the expense of the owner or developer. In the event the owner or developer is unable to acquire any necessary easement, right-of-way or property, and upon owner's or developer's written request, the city may negotiate to acquire the necessary easement, right-of-way, or property, failing which, the city shall (1) submit to owner or developer a map showing an alternative route (in which event the owner or developer will endeavor to acquire the

necessary easements, rights-of-way or property for such route) or (2) commence a condemnation action to acquire the easement or right-of-way for the drainage system facilities.

B. Owner's or developer's written request for city condemnation shall (1) describe all prior efforts to acquire the easement, right-of-way or property, and (2) state the amount offered the owner of the property. Owner or developer shall pay the city all amounts to be paid to an owner or occupant of the property for the acquisition of any easements, rights-of-way or property, including all attorney's fees incurred by the city or otherwise chargeable to the city.

#### **17.16.080 Construction of facilities.**

Upon completion of the plans and specifications by the professional engineer, and acquisition of the necessary easements, rights-of-way or property, the owner or developer shall then promptly proceed to cause that portion of the intermediate or major drainage system facilities to be installed, at the owner's or developer's sole expense, strictly in accordance with the plans and specifications thus prepared and approved. No facilities will be covered or backfilled until the same have been fully inspected and cover or backfill is authorized by the department. If any facility, or portion thereof, is covered without authorization, the department may require the facility to be reopened for inspection at the owner's or developer's cost. The actual interconnection of the intermediate or major drainage system facility with any other city line shall be done by the city, or by the contractor for the owner or developer under the supervision of the city, at the expense of the owner or developer. No unit or subdivision or an intermediate drainage system facility shall be connected to a major drainage system facility until the department has fully approved the facilities as constructed, and until

satisfactory evidence has been presented to the department showing that all bills for labor and material and all other costs of constructing the line have been paid.

#### **17.16.090 Inspection by department.**

The department, or its designee, shall inspect the installation and, if the facilities meet the requirements of the plans and specifications, shall give the owner or developer notice of acceptance. Upon completion of the facilities, the owner or developer shall assign and convey to the city all of the owner's or developer's right, title, estate and interest in the facilities. The city shall thereafter be the owner thereof, and shall operate and maintain the same, subject to the provisions of this title.

#### **17.16.100 Temporary facilities permitted when.**

The department may approve temporary drainage solutions providing for on-site detention and retention which will allow development to continue pending completion of an intermediate or major drainage system facility. The temporary solutions shall provide the same level of flood protection at all times that will be provided by the completed systems. All costs of temporary solutions shall be paid by the developer in addition to the other costs and fees provided for in this title.

#### **17.16.110 Connection to facility required.**

Except for the owner or developer constructing drainage system facility pursuant to this chapter 17.16, without the department's approval no owner or developer of real property in a drainage system benefited area shall subsequently construct an intermediate or major drainage system facility to serve land intended to be served by an intermediate and/or major drainage system facility designed to serve such land and constructed pursuant to

this chapter 17.16. Any unit or intermediate drainage system facility shall be connected to the intermediate or major drainage system facility constructed pursuant to this chapter 17.16, and all owners or developers, except for the owner or developer constructing a drainage system facility pursuant to this chapter 17.16, shall be responsible for payment of the impact fees due to the city under this title.

**17.16.120 Performance guaranties.**

A. In lieu of actual completion of the contemplated improvements, an owner or developer may file with the city a cash bond, an escrow agreement, or a letter of credit that is acceptable to the city in an amount specified by the department to assure actual construction of such improvements within a two-year period. 25% of the bond amount for public improvements shall extend for a one-year period beyond the date the improvements are completed to guaranty replacement of defective public improvements.

B. If the city determines that the required improvements should be completed in a specified sequence and/or in less than a two-year period in order to protect the health, safety and welfare of the city or its residents from flood hazards, it may require in approving the development that the improvements be installed in a specified sequence and period which may be less than two years and shall incorporate such requirements in the bond.

C. Inspections shall be made as soon as possible. If inspection shows that the improvements are acceptable to the city, the bond shall be released within seven days from the time of inspection and filing of the as-built plan. If the bonds are not released, refusal to release and the reasons therefore shall be given the developer in writing within seven days from the time of the inspection.

## **Chapter 17.24**

### **DETENTION PLANS**

#### **Sections:**

- 17.24.010 Generally.**
- 17.24.020 Plans and specifications.**
- 17.24.030 Rules and regulations adopted.**
- 17.24.040 City review.**
- 17.24.050 Construction approval.**
- 17.24.060 Temporary retention system.**
- 17.24.070 Responsibility for property and facilities.**

#### **17.24.010 Generally.**

The purpose of this chapter is to establish means, rules and regulations for the detention of flood waters or other excess water within a development, development site or subdivision.

#### **17.24.020 Plans and specifications.**

A. Prior to issuance of any final conditional use permit, recordation of a subdivision, or issuance of a building permit, the owner or developer shall, at his expense, have prepared by a professional engineer acceptable to the city, engineering calculations, detailed plans and specifications for the construction and installation of all unit or subdivision drainage system facility and detention system for the control of drainage of excess water within the development, or the part thereof for which a building permit has been requested, and the carriage of such water to a detention area.

B. In lieu of completion of the drainage system prior to final approval of the subdivision or development plan by the department, the developer or owner shall provide an acceptable assurance to the city that the detention plan will be constructed and installed as indicated and approved. Acceptable assurance shall consist of any one

of the types of performance guarantees listed in section 17.16.120.

#### **17.24.030 Rules and regulations adopted.**

The department may adopt reasonable rules and regulations for design requirements, review and approval of detention plans for developments or subdivisions consisting of more than a single lot. Such rules and regulations may address consolidation of, location of, access to and maintenance of detention facilities.

#### **17.24.040 City review.**

The engineering calculations and percolation test data, plans and specifications shall be reviewed by the department to determine that the detention system, as designed, will control the excess waters determined under both the engineering studies conducted pursuant to section 17.04.060 and to the detention requirements specified in the city's guidance document. If the detention system, as designed, will control the excess waters within the subdivision or development, and meets the above requirements, the department shall approve the system. If the system will not control the excess waters, or does not meet the above requirements, the department will specify, in writing, the deficiencies of the system as designed.

#### **17.24.050 Construction approval.**

Upon completion of such review and approval by the department and posting of a cash bond, an escrow agreement or a letter of credit that is acceptable to the city in an amount specified by the department, final approval of the subdivision or development plan or building permits for construction of the unit or subdivision drainage system facilities may be given.

#### **17.24.060 Temporary detention system.**

In the event the detention system is intended to be temporary, the property that is drained by the drainage facilities to be connected shall be subject to applicable fees.

**17.24.070      Responsibility for property  
                         and facilities.**

The city shall not own or have any responsibility or maintenance obligation for drainage facilities or detention systems constructed pursuant to this title unless (a) such facilities or systems are conveyed or dedicated to the city and the city accepts such conveyance or dedication, or (b) the city agrees by ordinance to undertake such responsibility or maintenance obligation.

## Chapter 17.25

### STORM WATER POLLUTION PREVENTION PLANS

#### Sections:

- 17.25.010 Storm water pollution prevention plan required.**
- 17.25.020 Storm water pollution prevention plan submittal.**
- 17.25.030 Fees.**
- 17.25.040 Excluded storm water control facilities.**
- 17.25.050 Existing water rights.**
- 17.25.060 New water rights.**
- 17.25.070 Plan runs with the land.**

#### **17.25.010 Storm water pollution prevention plan required.**

Anyone who constructs upon, or in any other way physically impacts, real property that is one acre or greater in size within the city shall comply with the requirements of this title prior to taking any action upon such property which may affect the detention, drainage, flow or water quality of storm waters within the city. All persons disturbing parcels greater than five acres in size shall file a notice of intent with the state to accompany the storm water pollution prevention plan. As set forth in this title, the storm water pollution prevention plan may, as determined by the city, require specific actions and consist of one or more components with respect to (a) drainage of subsurface waters, (b) construction of storm water facilities, (c) connection to existing storm water facilities, (d) maintenance of storm water facilities, (e) grading and erosion control, and (f) water quality.

#### **17.25.020 Storm water pollution prevention plan submittal.**

A. The storm water pollution prevention plan shall be submitted to the city for review

and approval prior to the commencement of work upon the property which is the subject of the plan. Plans shall be prepared by a licensed professional engineer, and shall include detailed plans and specifications for the construction and installation of all drainage system facilities for the control and drainage of excess waters on the property within said development, in accordance with department standards and in conformance with the city's guidance document.

B. All submitted plans shall show all existing irrigation ditches on the property and any canals adjacent and/or contiguous to the property. Failure to show said ditches or canals, or to adequately provide for all existing irrigation rights may, at the discretion of the city, result in the rejection of the storm water pollution prevention plan until such time as the city determines that applicant has made adequate provision for the existing irrigation rights located on or through the proposed site.

C. The storm water pollution prevention plan shall include such other information as may be deemed relevant by the city and shall be signed by the owner or a legally authorized representative of the owner of the property which is the subject of the plan and permit. The signatory shall be responsible for implementation of the storm water pollution prevention plan in its entirety during all phases of construction until all improvements have been made so as to prevent any contamination or violations to the city's storm water system. The city may require a bond to enforce the performance of the storm water pollution prevention plan.

#### **17.25.030 Fees.**

The appropriate review fees shall accompany all storm water pollution prevention plan submittals. Each component of the storm water pollution prevention plan

may require separate fees. All fees are non-refundable. The amount of such fees shall be set forth in the city's consolidated fee schedule from time to time.

**17.25.040 Excluded storm water control facilities.**

The provisions of this chapter shall not apply to any storm drains and subsurface collection systems under the control of county. A county permit is required for use of county facilities.

**17.25.050 Existing water rights.**

No storm water pollution prevention plan shall be required for any existing use of natural channels within the city for such beneficial purposes as are approved by the office of the state engineer, nor any water rights established by the state engineer or by any court of competent jurisdiction. No provision contained in this title shall be construed to interfere with or permit the use, allocation or reallocation of water rights, or of any culinary water collection or distribution system, or waters and facilities used in connection such rights or systems.

**17.25.060 New water rights.**

No individual or entity may file for any new water right with the office of the state engineer for water which is to be conveyed through a storm water drainage system facility controlled by this title, without first having obtained city's approval to transmit water through a city-owned or controlled storm drainage facility.

**17.25.070 Plan runs with the land.**

All storm water pollution prevention plans shall run with the land and shall be binding on the original applicants, their heirs, successors, and assigns.



## Chapter 17.26

### EROSION CONTROL PLANS

#### Sections:

- 17.26.010 Applicability.**
- 17.26.020 Water quality.**
- 17.26.030 Grading and erosion control requirements.**
- 17.26.040 Storm water pollution plan approval.**
- 17.26.050 Certificate of occupancy.**
- 17.26.060 Erosion control facilities.**
- 17.26.070 Failure to complete the work.**
- 17.26.080 Denial of plan.**
- 17.26.090 Modifications of approved plans.**
- 17.26.100 Responsibilities of the developer.**
- 17.26.110 Maintenance requirements.**
- 17.26.120 Variances and exceptions.**
- 17.26.130 Inspection.**

#### **17.26.010 Applicability**

The storm water pollution prevention plan shall include a grading and erosion control plan under the following circumstances:

A. A plan is required for sites greater than or equal to one acre in size, and all sites smaller than one acre if they are part of a total development that is larger than or equal to one acre in size. A plan is also required for any other site for which the city determines that the potential for erosion and sedimentation is high due to soil conditions, steep or irregular slopes, past regional sedimentation problems, or other applicable criteria.

B. A plan is required for sites of any size when the entire site or a portion of the site is within the sensitive lands overlay zone.

C. Except as may be exempted by this chapter, no person shall perform any grading, stripping, excavating, filling, or undertake any earth disturbance of any area greater than one

acre in size unless a valid storm water pollution prevention plan, with a grading and erosion control component, is approved by the city. Approval of a plan by the city does not exempt the parties from obtaining any permits required by the county, the state, or the federal government.

D. A separate erosion control plan may be required, if deemed necessary by the city engineer, for each separate grading and erosion control component of the construction. Plans shall include specifications and timing schedules for all earth disturbances. The plans shall be prepared under the supervision of a professional engineer licensed in the state of Utah and experienced in soil erosion and sedimentation control methods and techniques.

E. Plans and specifications submitted shall constitute a schedule of construction activities which shall meet all of the requirements of the guidance document.

#### **17.26.020 Water quality.**

A. Pursuant to the terms, conditions and requirements of the UPDES permit issued to the county by the state, the city is required to develop and implement a storm water management plan to control discharges to the municipal separate storm sewer system ("MS4") owned or operated by the city. Elements of this mandatory program require the city to take steps to minimize the discharge of sediment, debris, oil and grease, pesticides, metals, nutrients, bacteria and viruses, and other pollutants from storm runoff generated from developed real property within the city.

B. All construction and substantial improvement projects shall be designed to include specific measures to reduce pollutants generated from a 10-year storm event. This subsection B shall not apply to the alterations of an existing developed property that change the "footprint" of a site or building in such a

way that there is a disturbance of less than 5,000 square feet of land.

C. Prior to the approval of a storm water pollution prevention plan for any construction or substantial improvement project, an erosion control plan shall be prepared by a civil engineer, registered in the state of Utah, and submitted to the city for review and approval. This plan shall be prepared using the guidance document; shall address specific pollutants expected to be generated from the specific site; and shall describe all permanent water quality best management practices ("BMPs") to be used on the fully-developed site. The type and scope of this plan will vary with the characteristics of each site. Review and approval of this plan by the city is required before any permits are issued that relate to the project.

D. The design and planning of all storm water management facilities or BMPs shall include detailed maintenance and repair procedures to ensure their continued functioning. These procedures will identify the parts or components of a storm water management facility that need to be maintained and the equipment and skills or training necessary. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan. The developer shall be responsible for maintenance of any and all facilities included in the approved erosion control plan. Failure to comply with the approved storm water pollution prevention plan shall result in a civil or criminal violation in accordance with the provisions of chapter 17.34 of this title.

E. All storm water management facilities shall be subject to an annual inspection by the city to document maintenance and repair needs and to ensure compliance with the requirements of this chapter and

accomplishment of its purposes. These needs may include removal of silt, litter and other debris from all catch basins, inlets and drainage pipes; grass cutting and vegetation removal; and necessary replacement of landscape vegetation. Any maintenance deficiencies shall be corrected within such time period as is determined to be reasonable by the city, and the inspection and maintenance requirements may be increased as deemed necessary to ensure proper functioning of the storm water management facility. Additional inspections may be required as determined to be appropriate by the city.

#### **17.26.030 Grading and erosion control requirements.**

A. The provisions of the storm water pollution prevention plan may include, as determined to be appropriate by the city, the restrictions or requirements set forth in this chapter with respect to grading and erosion control.

B. Anyone who undertakes, or is responsible for undertaking, an activity which involves earth disturbance is ultimately responsible to ensure that soil erosion and sedimentation (and changed water flow characteristics) are controlled to the extent necessary to avoid damage to personal and real property, and to prevent pollution of the municipal separate storm sewer system and final destination. Nothing in this title shall be construed as (1) lessening the ultimate responsibility of such persons or entities, or (2) implying the city's assumption of any related liability. The provisions of this title are to be considered as minimum standards which are not necessarily adequate to meet the highly variable conditions which must be covered by effective control measures. Therefore, compliance with the requirements of this title does not relieve anyone's responsibility to

provide effective grading and erosion control measures.

C. As set forth in this chapter, no site construction plan shall be approved unless said construction plan includes soil erosion and sediment control measures consistent with the requirements of this chapter and all other applicable land development regulations.

D. The guidance document is hereby adopted as the appropriate reference for water quality and erosion control criteria. The city shall be guided by and shall apply the criteria contained within the guidance document in the administration of this title.

**17.26.040 Storm water pollution plan approval.**

No construction plan shall be approved unless it includes a storm water pollution prevention plan consistent with city, state and federal standards and other all other applicable land development regulations.

**17.26.050 Certificate of occupancy.**

No certificate of occupancy shall be issued by the city until the city has confirmed the applicant's compliance with this title.

**17.26.060 Erosion control facilities.**

A. All temporary erosion control facilities, and all permanent facilities intended to control Erosion of any earth disturbance operations, shall be installed as defined in the approved plans. The installation of the first level of temporary Erosion control facilities shall be installed and inspected prior to any earth disturbance operations taking place.

B. All required BMPs shall be installed in accordance with the guidance document and maintained throughout the duration of the construction project.

C. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation.

D. Anyone engaged in earth disturbances shall implement and maintain acceptable soil erosion and sediment control measures in conformance with the erosion control technical standards of the guidance document and in accordance with the soil stabilization plan approved by the city.

E. All earth disturbances shall be designed, constructed, and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest possible period of time.

F. Suspended sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth disturbance.

G Any temporary or permanent facility designed and constructed for the conveyance of water around, through, or from the earth disturbance area shall be designed to limit the water flow to a non-erosive velocity.

H. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to the standards and specifications prescribed in accordance with the provisions and permanent erosion control in the guidance document and in accordance with the features shown on the storm water pollution prevention plan approved by the city.

I. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within fourteen (14) calendar days after final grading, or final earth disturbance, has been completed. All temporary soil erosion control measures shall be maintained until permanent soil erosion control measures are implemented.

J. The owner, developer, contractor and/or their authorized agents shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm water drainage system and storm water appurtenances as a result of site development.

K. No one shall cause the impediment of storm water flow in the flow line of the curb and gutter.

L. The contractor shall prevent sediment, debris and all other pollutants from entering the storm water drainage system during all phases of demolition.

#### **17.26.070 Failure to complete the work.**

If a developer fails to complete the work or fails to comply with all the requirements, conditions, and terms of the grading and erosion component of the storm water pollution prevention plan, the city may suspend the plan and may order such work as is necessary to eliminate any danger to persons or property and to leave the site in a safe condition. The city may also authorize completion of all necessary temporary or permanent soil erosion control measures. The developer shall be liable to the city for all costs and expenses that may be incurred or expended by the city in bringing the property into compliance with the requirements of the plan and any collection costs, including legal fees, incurred by the city. The city may recover these costs through appropriate legal action.

#### **17.26.080 Denial of plan.**

The grading and erosion control component of a storm water pollution prevention plan shall not be approved where:

A. The proposed work would cause hazards to the public safety and welfare; or

B. The work, as proposed by the applicant, will damage any public or private property; interfere with any existing drainage course in such a manner as to cause damage to any adjacent property; result in the deposition of pollutants on any public right-of-way or into any waterway; or create an unreasonable hazard to persons or property; or

C. The land area for which grading is proposed is subject to geological hazard that no reasonable amount of corrective work can eliminate.

#### **17.26.090 Modifications of approved plans.**

All proposed modifications of the approved construction activities storm water pollution prevention plan must be submitted, along with all supporting materials, to the city for review and approval. No work in connection with the proposed modifications shall be permitted without the department's prior approval. Approval shall be granted when the applicant can demonstrate, to the department's satisfaction, that the modifications will provide soil erosion controls equivalent to, or better than, the originally-approved grading and erosion control component of the storm water pollution prevention plan.

#### **17.26.100 Responsibilities of the developer.**

During grading operations the developer shall be responsible for:

A. The prevention of damage to any public utilities or services within the limits of grading, and along any routes of travel of the equipment;

B. The prevention of damage to adjacent property. No one shall grade on land so close to the property line as to endanger any adjoining public street, sidewalk, alley, or any

public or private property without supporting and protecting such property from settling, cracking, or other damage which might result; and as directed by a Utah-licensed engineer who is an expert in retaining wall structures and geotechnical engineering and as specifically approved prior to construction by the city;

C. Carrying out the proposed work in accordance with the approved plans and in compliance with all the requirements of the storm water pollution prevention plan and this chapter; and

D. The prompt removal of all soil, miscellaneous debris or materials that have been applied, dumped, or otherwise deposited on public streets, highways, sidewalks or other public thoroughfares, or any other non-authorized off-site location.

#### **17.26.110 Maintenance requirements.**

The developer responsible for carrying out grading and erosion control measures under this chapter, and all subsequent owners or tenants of property on which such measures have been taken, shall maintain all temporary and permanent erosion control measures, retaining walls, structures, plantings, and other protective devices. If such responsible parties fail to so act, the City may enter the affected property and take such action as authorized by section 17.26.070 of this chapter.

#### **17.26.120 Variances and exceptions.**

No grading and erosion component of a storm water pollution prevention plan shall be required for the following:

A. Agricultural use of land zoned agricultural.

B. Grading or an excavation below finished grade for basements, footings, retaining walls, or other structures unless

required otherwise under section 17.26.010 of this chapter.

C. A sidewalk or driveway authorized by a valid permit unless required otherwise by city engineer. Parking lot construction is not exempted if such construction qualifies under section 17.26.010 of this chapter.

D. The repair or maintenance of all utilities under hard surfaced roads, streets, or sidewalks, provided such land-disturbing activity is confined to the area which is hard surfaced and provided that runoff and erosion from soil stockpiles is confined and will not enter the drainage system.

E. Even if no plans are required under subsections (A) through (D) of this section, those operations and construction activities which are exempted from submitting plans must still comply with the rules and regulations concerning grading, erosion control, and water quality specified in this chapter, and shall provide appropriate controls to retain sediment on the construction site. Exemption from city's requirements for submitting a storm water pollution prevention plan does not preclude the developer from obtaining any required state or federal permits.

#### **17.26.130 Inspection**

A. If the city finds that the erosion and sediment control devices are not removing the accelerated erosion and suspended sediment prior to the drainage leaving the construction site, the city may direct the developer by written order to install any erosion and sediment controls that are deemed necessary to prevent said soil erosion from migrating off site. If immediate additional erosion and sediment control or repair is necessary due to functional inadequacies, the developer shall be verbally notified followed by a written confirmation. It shall be the duty of the developer to immediately take all necessary steps to comply with such order and otherwise

to take all necessary steps to prevent such migration of sediment off the premises or entering receiving waters. Delivery of an order by the city to the developer shall be deemed to be notice of such order.

B. The city's manager, building official, engineer, and their designees having proper credentials and identification, shall be permitted to enter at all reasonable times in, or upon, any private or public property for the purpose of inspecting and investigating conditions and practices which may be in violation of the grading and erosion control component of a storm water pollution prevention plan or otherwise in violation of this chapter.

## Chapter 17.27

### STORM DRAINAGE SYSTEMS

#### Sections:

- 17.27.010 Control of surface waters.**  
**17.27.020 Permanent retention facilities.**

#### **17.27.010 Control of surface waters.**

A. If directed by the city, a storm water pollution prevention plan shall include the restrictions or requirements of this chapter concerning collection and drainage of surface waters and the construction, use and maintenance of storm water drainage systems.

B. As determined to be necessary by the city, anyone developing real property within the City may be required to provide, at the developer's own expense:

(1) The means, structures and systems necessary to provide for the detention of storm waters on the property, or for the entire development;

(2) The private drainage system facility needed to control storm water runoff on the property and discharge it into an approved drainage system facility;

(3) The unit drainage system facilities required to control storm water runoff from any property to be dedicated to the city within the development;

(4) The intermediate drainage system required to convey storm waters to the major drainage system; and/or

(5) Any portion of the major drainage system needed to safely convey storm water runoff from the property, which portion of the system may be located within or adjacent to the property. Those who are directed by the city to, and do, construct major drainage system improvements serving other areas of the city may be entitled to a storm drain impact fee

offset or reimbursement for the cost of constructing certain portions of the major drainage system, in accordance with chapter 17.28 of this code.

C. Any unit or intermediate drainage system facilities within the city constructed by a developer shall be connected to the appropriate intermediate or major drainage system facility constructed to serve the area which includes the development. The Developer shall be responsible for payment of any and all fees that may be required by this title.

#### **17.27.020 Permanent retention facilities.**

A. In certain areas of the city, it may be impractical to plan and construct a storm water drainage system due to topography and/or lack of development. The city engineer shall from time to time designate those areas of the city where it is impractical to construct storm water drainage systems. The city may authorize development within such areas to pay a fee in lieu for the construction or improvement of regional storm water facilities, provided that storm water is routed to drainage facilities approved by the city engineer. In other cases, the development may direct discharge and pay a fee in lieu to mitigate impact to the drainage system as determined by the director in consultation with the city engineer.

B. All proposed plans and specifications shall be reviewed by the city to determine that the detention system as designed will (among other city requirements) adequately control excess runoff waters, and that adequate provision is made for overflow in excess of a ten-year frequency flood. Detention facilities shall be constructed as directed by the director in consultation with the city engineer. On-site detention facilities shall comply with all other

city ordinances, including but not limited to, landscaping requirements.

C. All on-site detention facilities shall be owned and maintained by the developer constructing the facility unless otherwise designated on the city-approved plat.



## Chapter 17.28

### STORM WATER FACILITIES AND IMPACT FEES

#### Sections:

- 17.28.010 Purpose.**
- 17.28.020 Impact fees imposed.**
- 17.28.030 Developer credits.**
- 17.28.040 Impact fees accounting.**
- 17.28.050 Impact fee amount.**
- 17.28.060 Fee exceptions and adjustments.**
- 17.28.070 Service area.**
- 17.28.080 Administrative challenges and appeals procedure.**
- 17.28.090 Bonding for drainage facilities.**

#### **17.28.010 Purpose.**

The purpose of this chapter is to provide a fair and equitable means of funding the storm water facilities which will be necessary to service anticipated future growth and development in the city. The impact fees for storm water facilities implemented through this chapter will help achieve an equitable allocation of the costs of providing such facilities which are reasonably related to and necessary to service anticipated future growth.

#### **17.28.020 Impact fees imposed.**

Storm water facilities impact fees hereby are imposed on the basis of the city's capital facilities plan and the impact fee analysis.

#### **17.28.030 Developer credits.**

At the city's discretion, a developer may be allowed a credit against impact fees imposed hereunder for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if the facilities (1) are identified in the capital facilities plan; and (2) meet the city's requirements. At the city's discretion, a

developer may be reimbursed for any dedication of land for, improvement to, or new construction of, any system improvements provided by the developer if (1) the facilities are identified in the capital facilities plan; (2) the facilities meet the city's requirements; and (3) such reimbursement is memorialized in a reimbursement agreement acceptable to the city, including, without limitation, a provision that reimbursements will be paid only from impact fees collected from the specific subdivision or project to which such reimbursement relates. Otherwise, no credit or reimbursement will be allowed.

#### **17.28.040 Impact fees accounting.**

The city will establish a separate interest-bearing ledger account for impact fees collected pursuant to this chapter. Interest earned on such account shall be segregated to that account.

A. Reporting. At the end of each fiscal year, the city shall prepare a report on such account generally showing the source and amount of all monies collected, earned and received by the fund or account and each expenditure from the fund or account.

B. Impact Fee Expenditures. The city may expend impact fees covered by this chapter only for system improvements that are (1) public facilities identified in the capital facilities plan; and (2) of the specific public facilities type for which the fee was collected.

C. Time of Expenditure. Impact fees collected pursuant to this chapter are to be expended, dedicated or encumbered for a permissible use within six years of the receipt of those funds by the city, unless the city council directs otherwise. For purposes of this calculation, the first funds received shall be deemed to be the first funds expended.

D. Extension of Time. The city may hold previously dedicated or unencumbered fees for longer than six years if it identifies in writing (1) an extraordinary and compelling reason

why the fees should be held longer than six years; and (2) an absolute date by which the fees will be expended.

E. Refunds. The city shall refund any impact fees paid by a developer, plus interest actually earned when (1) the developer does not proceed with the building activity and files a written request for a refund; (2) the fees have not been spent or encumbered; (3) the developer has contributed in excess of their proportional costs; and (4) no impact has resulted.

F. Additional Fees and Costs. The impact fees authorized hereby are separate from and in addition to user fees and other charges lawfully imposed by the city, such as engineering and inspection fees, and other fees and costs that may not be included as itemized component parts of the impact fee.

G. Fees Effective at Time of Payment. Unless the city is otherwise bound by a contractual requirement, the impact fee shall be determined from the fee schedule in effect at the time of payment.

#### **17.28.050 Impact fee amount.**

Impact fees are hereby imposed as a condition of the issuance of a building permit by the city for any development activity which creates additional demand and need for public facilities. Fees are calculated and imposed under this chapter pursuant to the schedule shown on Chart 17.28.050.

#### **17.28.060 Impact fee exceptions and adjustments.**

A. Waiver for "Public Purpose." The city council may, on a project-by-project basis, authorize exceptions or adjustments to the then impact fee rate structure under this chapter for those projects the council determines to be of such benefit to the community as a whole to justify the exception or adjustment. Such projects may include low income housing.

B. Adjustments. The council may adjust impact fees imposed pursuant to this chapter as necessary in order to respond to unusual circumstances in specific areas, ensure that impact fees are imposed fairly, permit the adjustments of the amount of the fees based upon studies and data submitted by an applicant in order to ensure that the impact fee represents the proportionate share of the cost of providing such public facilities which are reasonably related to and necessary in order to provide the services in question to anticipate future growth and development activities.

#### **17.28.070 Service area.**

The entire area of the city, and any additional area hereafter annexed to the city, is hereby designated and established as one service area with respect to storm water facilities and the assessment of storm water impact fees.

#### **17.28.080 Administrative challenges and appeals procedure.**

A. Application. The procedures in this section apply both to challenges to the legality of impact fees, to similar and related fees of the city and to the interpretation and/or application of those fees.

B. Declaratory Judgment Action. Any person or entity residing in or owning property within the city, and any organization, association or corporation representing the interests of persons or entities owning property within the city may file a declaratory judgment action challenging the validity of an impact fee only after having first exhausted their administrative remedies of this section.

C. Request for Information Concerning the Impact Fee. Any person or entity required to pay an impact fee under this chapter may file a written request for information concerning the fee with the city. The city will provide the person or entity with the city's written impact fee analysis and other relevant

information relating to the impact fee within 14 days after receipt of the request for information.

D. Appeal to the City before Payment of the Impact Fee. Any affected or potentially affected person or entity who wishes to challenge an impact fee under this chapter before payment thereof may file a written request for information concerning the fee and proceed under the city's appeal procedure.

E. Appeal to the City after Payment of the Impact Fee; Statute of Limitations for Failure to File. Any person or entity that has paid an impact fee and wishes to challenge an impact fee under this chapter shall file a written request for information concerning the fee within 30 days after having paid the fee and thereafter shall proceed under the city's appeal procedure. If 30 days has passed after payment of the impact fee and a written request for information or challenge has not been filed with the city, the person or entity is barred from filing an administrative appeal with the city or seeking judicial relief.

F. Appeals to the City. Any developer, landowner or affected party desiring to challenge the legality of any impact fee or related fee or exaction may appeal directly to the city by filing a written challenge with the city, provided that the affected party does so in writing within 30 days after the action or decision to which the appeal relates. If no written challenge is filed with the city within such 30 day period, the affected party may neither process an administrative appeal with the city nor seek judicial relief.

1. Hearing. An informal hearing will be held before the city's manager or other designated appeal authority or hearing officer not sooner than five days nor more than 25 days after the written appeal to the city is filed.

2. Decision. After the conclusion of the informal hearing, the appeal authority or hearing officer shall affirm, reverse, or take action with respect to the challenge or appeal

as the appeal authority or hearing officer deems appropriate. Such decision will be issued within 30 days after the date the written challenge was filed. In light of the statutorily mandated time restriction, the city shall not be required to provide more than three working days prior notice of the time, date and location of the informal hearing, and the inconvenience of the hearing to the challenging party shall not serve as a basis of appeal of the city's final determination.

G. Denial Due to Passage of Time. Should the city, for any reason, fail to issue a final decision on a written challenge to an impact fee, its calculation or application, within 30 days after the filing of that challenge with the city, the challenge shall be deemed to have been denied and any affected party to the proceedings may seek any legally-available judicial relief from such denial.

H. Judicial Review; Record of Proceedings. Any party to the administrative action who is adversely affected by the city's final decision must petition the district court for a review of the decision within 90 days after the city's final decision upholding an impact fee, its calculation or application, or within 120 days after the written challenge to the impact fee, its calculation or application, was filed with the city, whichever is earlier. After having been served with a copy of the pleadings initiating the court review, the city shall submit to the court the record of the proceedings before the city, including minutes, and, if available, a true and correct transcript of the informal hearing or other proceedings.

#### **17.28.090 Bonding for drainage facilities.**

At the city's discretion, any developer may be allowed to provide a cash bond, letter of credit or escrow account to guarantee the construction or maintenance of any improvements required or permitted to be constructed under this title. All such bonds,

letters of credit or deposits shall be in such form as the city may direct, and shall guarantee the full and timely performance of all construction and/or the payment of all fees, costs and charges required under this title.

## Chapter 17.30

### GROUNDWATER SOURCE PROTECTION

#### Sections:

- 17.30.010 Title, applicability and authority.
- 17.30.020 Purpose and intent.
- 17.30.030 Definitions.
- 17.30.040 Extent and designation of recharge areas and protection zones.
- 17.30.050 Designation of recharge areas and protection zones.
- 17.30.060 Review of recharge area and protection zone map.
- 17.30.070 Uses and restrictions within recharge areas and protection zones.
- 17.30.080 Review of development plans; Permits.
- 17.30.090 Disputes and appeals.
- 17.30.100 Management strategies; Best management practices.
- 17.30.110 Exclusions and exemptions.
- 17.30.120 Enforcement, violations and penalties—Civil.
- 17.30.130 Inspection authority.
- 17.30.140 Criminal penalty.
- 17.30.150 Appendices.

#### 17.30.010 Title, applicability and authority.

A. Title. This chapter shall be known as the "Ground Water Source Protection Ordinance."

B. Applicability. This chapter shall be effective within the city's boundaries with respect to both city-owned and non-city-owned ground water sources, and, to the fullest extent permitted by law, outside the city's boundaries with respect to city-owned ground water sources. This chapter establishes certain standards and restrictions intended to prevent contamination of the public drinking water supply as a result of toxic substances entering the ground water. Compliance with this chapter shall be the responsibility of any person owning real property and/or owning or operating a business within the protective zones or recharge areas established pursuant to this chapter. Unless otherwise specified, the provisions of this chapter apply only to new development or a change in property use; a change or expansion of an existing legal nonconforming use; and the handling, movement, and storage of hazardous waste, petroleum products and regulated substances, which occur or commence after the effective date hereof.

C. Authority. This chapter is adopted pursuant to the authority provided in the Utah Municipal Land Use Development and Management Act, UTAH CODE ANN. section 10-8-15, Rules 309-113 of the UTAH ADMINISTRATIVE CODE, and other applicable statutory and common law of the state of Utah.

#### 17.30.020 Purpose and intent.

A. The purpose of this chapter is to protect, preserve, and maintain existing and potential public drinking water sources in order to safeguard the public health, safety and welfare of customers and other users of the city's public drinking water supply, distribution and delivery system. The intent of this chapter is to establish and designate drinking water source protection zones and ground water recharge areas for all underground sources of public drinking water

which enter the public's culinary drinking water supply, distribution and delivery system, whether such sources are located within, or outside of, the city's boundaries. This chapter establishes criteria for regulating the storage, handling, use or production of hazardous waste, petroleum products and regulated substances within identified areas where ground water is, or could be affected by the potential contaminant source. This shall be accomplished by the designation and regulation of property uses and conditions that may be maintained within such zones or areas.

B. This chapter shall not be construed to allow a permitted or a conditional use except as that use may be provided in the zoning ordinance of this code. It is the purpose of this chapter to regulate and/or prohibit certain land uses which may be otherwise classified as permitted or conditional uses under the zoning ordinance, and if the provisions of this chapter conflict with the zoning ordinance in this regard, the more strict provisions shall apply.

C. The degree of protection afforded by this chapter is considered adequate for regulatory purposes. This chapter does not ensure that public drinking water sources will not be subject to accidental or intentional contamination, nor does it create liability on the part of the city, or an officer or employee thereof, for any damages to the public water supplies from reliance on this chapter nor any administrative order lawfully made hereunder.

D. Compliance with the terms of this chapter shall not relieve the person subject to the terms hereof of the obligation to comply with any other applicable federal, state, regional or local regulation, rule, ordinance or requirement.

### **17.30.030 Definitions.**

Unless the context specifically indicates otherwise, the meanings of terms used in this chapter shall be as follows:

A. "*Abandoned well*" means a well, the use of which has been permanently discontinued or is in such a state of disrepair that it cannot be used for its intended purpose or for observation purposes.

B. "*Best management practices*" ("*BMPs*") means a practice or combination of practices determined to be the most effective practicable (including technological, economic, and institutional considerations) means of preventing or reducing the amount of pollution to a level compatible with water, soil, and air quality goals.

C. "*City*" means the city of Cottonwood Heights.

D. "*Closure*" means the cessation of operation of a facility, or any portion thereof, and the act of securing such facility or portion thereof to ensure protection of ground water in accordance with the appropriate state, federal and local regulations applicable to the specific facility and with the provisions of this chapter.

E. "*Continuous transit*" means the nonstop movement of a mobile vehicle except for stops required by traffic laws.

F. "*Department*" means the city's community development department or designee.

G. "*Director*" means the director of the community development department or his designee.

H. "*Discharge*" means and includes, without limitation, spilling, leaking, seeping, pouring, injecting, emitting, emptying, disposing, releasing, or dumping regulated substances, hazardous waste or petroleum products to the soils, air, ground waters, or

surface waters of the city. Discharge does not include (1) the use of a regulated substance in accordance with the appropriate use intended or specified by the manufacturer of the substance, provided that such use is not prohibited by federal, state, or local regulations, nor (2) discharges specifically authorized by federal or state permits.

I. "*Drinking water source*" means a drinking water spring or well supplying water which has been permitted or intended for consumptive use.

J. "*Drinking water source protection zone*" ("*DWSP*") or protection zone means an area within which best management practices are mandated for restricted uses, or certain uses are prohibited, in order to protect ground water flowing to public drinking water sources, and designated as a protection zone, level 1, 2, 3, or 4, pursuant to section 17.30.050 of this chapter.

K. "*Ground water*" means any water which may be drawn from the ground.

L. "*Ground water discharge area*" means an area where the direction of ground water movement is upward from the principal aquifer to the shallow unconfined aquifer. Discharge areas, determined by the United States Geological Survey ("*USGS*"), are shown on appendix C in section 17.30.150 of this chapter.

M. "*Ground water divide*" mean a line on a water table on each side of which the water table slopes downward in a direction away from the line.

N. "*Ground water TOT*" means time of travel for ground water to reach a drinking water source.

O. "*Handle*" means to use, generate, process, produce, package, treat, store or

transport a regulated substance, hazardous waste or petroleum product in any fashion.

P. "*Hazardous waste*" means all waste regulated under the following federal acts: the Reserve Conservation and Recovery Act, the Toxic Substance Control Act, the Clean Water Act, the Clean Air Act, the Solid Waste Disposal Act, the Atomic Energy Act of 1954, and any and all other applicable federal laws.

Q. "*Health department*" means the Salt Lake Valley Health Department.

R. "*Municipal council*" means the municipal council of the city of Cottonwood Heights, Utah.

S. "*Operating permit*" means a permit to operate a facility handling regulated substances, hazardous waste or petroleum products under this chapter. The permit will be issued by the city's community development department.

T. "*PCS*" means a potential contaminant source.

U. "*Petroleum product*" means and includes fuels (gasoline, diesel fuel, kerosene, and mixtures of these products), lubricating oils, motor oils (new and used), hydraulic fluids, and other similar petroleum based products.

V. "*Recharge area*" means either a primary or secondary recharge area.

W. "*Recharge area and protection zone map*" means the map by that name designated in section 17.30.040 of this chapter.

X. "*Regulated person*" means a person, corporation, partnership, limited liability company, association or other legal entity subject to this chapter.

Y. "*Regulated substances*" means substances (including degradation and interaction products) which because of quantity, concentration, or physical, chemical (including ignitability, corrosivity, reactivity and toxicity), infectious characteristics, radiomutagenicity, carcinogenicity, teratogenicity, bioaccumulative effect, persistence (nondegradability) in nature, or any other characteristics relevant to a particular material that may cause significant harm to human health and/or the environment (including surface and ground water, plants, and animals), including, without limitation, those substances set forth in the generic regulated substances list which is included as appendix A in section 17.30.150 of this chapter; and the substances set forth in the following lists, as the same may be amended from time to time; identification and listing of hazardous materials (40 CFR part 261, subpart D) and list of extremely hazardous substances (40 CFR part 355, appendices A and B) and which are in a form capable of entering ground water.

Z. "*Residential use*" means any building or structure or portion thereof that is designated for or used for residential purposes and any activity involving the use or occupancy of a lot for residential purposes. Residential use shall include those customary and accessory residential activities associated with the principal permitted use of a lot for residential purposes as provided in the city's zoning ordinance.

AA. "*Secondary containment*" means any system that is used to provide release detection and release prevention, such as trays under containers, floor curbing or other systems designed to hold materials or liquids that may discharge from containers holding regulated substances, petroleum products or hazardous substances. Examples include a double walled

tank; a double walled integral piping system, or single walled tank or integral piping system that is protected by an enclosed concrete vault, liner or an impervious containment area.

BB. "*Septic holding tank*" means a watertight receptacle, used to contain septic waste, the contents of which are removed and disposed of at a waste disposal facility.

CC. "*Septic tank system*" means a generally watertight receptacle connected to a drain field that allows liquid from the tank to enter the soil. The system is constructed to promote separation of solid and liquid components of domestic wastewater, to provide decomposition of organic matter, to store solids and to allow clarified liquid to discharge for further treatment and disposal in a soil absorption system.

DD. "*Sludge or biosolids*" means the solids separated from wastewater during the wastewater treatment process.

EE. "*Travel time contour*" means the locus of points that form a line of any configuration in space from which ground water particles on that line theoretically take an equal amount of time to reach a given destination, such as a well or a well field, as predicted by the refined Salt Lake Valley mod flow/mod path model.

FF. "*USGS*" means the United States Geological Survey.

GG. "*Well*" means any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed when the intended use of such excavation is for the location, acquisition, development or artificial recharge of ground water.

HH. "*Well field*" means an area of land which contains one or more drinking water supply wells.



**17.30.040 Extent of recharge areas and protection zones.**

The extent of the recharge areas and the protection zones may be seen on the recharge area and protection zone map, appendix C in section 17.30.150 of this chapter. The recharge area and protection zone map is incorporated and made a part of this chapter. The recharge area boundary lines have been located along streets and/or section lines for convenience of assessing which prohibition and restrictions apply to a specific property. Amendments, additions, or deletions to this map may be made by the municipal council following public notice and upon the recommendation of the department. Notice shall be published one time at least 30 days prior to consideration of the proposed changes.

**17.30.050 Designation of recharge areas and protection zones.**

A. Recharge areas and protection zones.  
The following recharge areas and protection zones are hereby designated within the city:

1. Primary recharge area, as determined by the USGS (see appendix C in section 17.30.150 of this chapter).

2. Secondary recharge, as determined by the USGS (see appendix C in section 17.30.150 of this chapter).

3. Protection zone 1 shall be the area within a 100 foot radius from the well or margin of the collection area.

4. Protection zone 2 shall be the area within a 250 day ground water TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground water source or the ground water divide, whichever is closer.

5. Protection zone 3 shall be the area within a three year ground water TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground water source or the ground water divide, whichever is closer.

6. Protection zone 4 shall be the area within a 15 year ground water TOT to the margin of the collection area, the boundary of the aquifer(s) which supplies water to the ground water source or the ground water divide, whichever is closer.

B. Location Determination. In determining the location of properties and facilities within the areas and zones depicted on the recharge area and protection zone map, the following rules shall apply:

1. Property located wholly or partially in a recharge area or a protection zone on the overlay map shall be governed by the restrictions applicable to that recharge area or protection zone.

2. Properties located within more than one recharge area or protection zone as shown on the overlay map shall be governed by the restrictions applicable to the most restrictive protection zone.

**17.30.060 Review of recharge area and protection zone map.**

The department shall endeavor to review the recharge area and protection zone map at least once every five years or more frequently as determined appropriate by the director. Failure to conduct this review shall not affect the validity of the existing approved map. The basis for updating the map may include, but is not limited to, the following:

A. Changes in technical or scientific knowledge in the areas of geohydrology, hydraulics and geology.

- B. Changes in well field configuration.
- C. Changes in pumping rates for the well field.
- D. Development of new wells, well fields, and/or springs.
- E. Changes in water quality.

**17.30.070 Uses and restrictions within recharge areas and protection zones.**

A. Prohibitions and restrictions. A list of uses which may constitute potential contamination sources is found in appendix B in section 17.30.150 of this chapter. The list categorizes each use as either permitted, restricted or prohibited within protection zones referenced in appendix C in section 17.30.150 of this chapter, and includes BMPs, if available, for each use. Permit requests for restricted uses shall be processed as provided in section 17.30.080 of this chapter. The department shall update and/or revise appendix B in section 17.30.150 of this chapter from time to time as uses, technology, and BMPs evolve over time. Appendices B and C in section 17.30.150 of this chapter shall not be construed to allow a permitted or a conditional use except as that use may be provided in the city's zoning ordinance. It is the purpose of this chapter to regulate and/or prohibit certain land uses which may be otherwise classified as permitted or conditional uses under the zoning ordinance, and if the provisions of this chapter conflict with the zoning ordinance in this regard, the more strict provisions shall apply.

B. Discharge. A person may not discharge, or permit the discharge, of any regulated substance, hazardous waste or petroleum product, whether treated or untreated, to soils, air, ground water, or surface water in any recharge area or

protection zone, that may have a deleterious effect upon the ground water in the city, unless the discharge is in compliance with federal, state, and local regulations.

**17.30.080 Review of development plans; Permits.**

A. Application. Permit applications for all new restricted uses, or expansion of an existing restricted use shall be submitted to the department for review, issuance of building permits (if applicable) and issuance of an operating permit.

B. Approval of permit. If the department finds that the proposed use will not have an adverse impact on ground water quality, the director or the director's designee may approve the issuance of the permit. If the department finds that the potential adverse impacts can be mitigated by implementing best management practices or other conditions and regulations, the permit may be approved by the director or the director's designee and referred to the planning commission for its further action. If approved, all recommendations of the department shall be attached to the permit as conditions of approval.

C. Denial of permit. If the department determines that the proposed use may have an adverse effect upon ground water quality, and that the adverse effect cannot be adequately mitigated through use of BMPs or other methods the permit shall be denied.

**17.30.090 Disputes and appeals.**

A. Disputes. Persons objecting to the configuration of the recharge area and protection zone map, or the inclusion of specific property within any recharge areas or protection zones, or the denial of a permit or the conditions attached thereto, or any rulings of the department under this section, may

appeal to the department by filing a written notice of appeal not later than 30 days following the department's action.

B. Appeal. The written appeal shall contain:

1. Documentation of compliance; or
2. Response to specific violations cited in the cease and desist order and the remedial actions planned to bring the facility into compliance.

C. Review. Upon receipt of the written appeal, the director shall review the appeal within ten days of its receipt and respond to the appellant. If the director determines that the written response from the appellant is adequate and noncompliance issues are addressed, the appellant will be notified by mail and no further action is required. If the director determines that the appeals response is inadequate, the appellant may request a hearing before the city manager or designee. This hearing shall be held within 30 days after receiving the request for hearing. The order being appealed from shall remain in effect until the hearing is conducted. Within ten days after the hearing, the city manager or designee shall enter findings, conclusions and a final decision within ten days of a final written decision in the matter and shall notify the appellant by mail.

D. Method of notice. A notice under this section shall be deemed sufficient if given personally, or if given by certified mail, return receipt requested.

E. Petition for review. Any person adversely affected by the final decision of the city manager may file a petition for review of the decision with the district court within 30 days after the decision is final. The final decision of the city manager shall be valid if the decision is supported by substantial

evidence in the record and is not arbitrary, capricious or illegal.

#### **17.30.100 Management strategies; Best management practices.**

##### A. Toxic, hazardous and other materials handling regulations.

1. *Storage Containers*. All regulated substances, hazardous waste, and petroleum products shall be stored in suitable containers to reduce the chance for accidental introduction into the environment. These storage containers shall be product tight and, except where provided elsewhere in this chapter, shall be provided with a means to control spillage and to contain or drain off spillage and fire protection water discharged in the storage area. Storage containers and secondary containment areas must be covered and/or elevated to prevent the accumulation of rain or other water. Defective storage containers shall be removed from service for repair or disposal in accordance with local, state, and federal standards.

2. *Secondary Containment*. Secondary containment shall be constructed of a material of sufficient structural integrity and composition to contain the required capacity of liquids and not be structurally weakened as a result of contact with the discharge of the regulated substance, hazardous waste or petroleum product to be contained. The material shall be free of cracks, joints, gaps, or other imperfections which would allow leakage through the containment material.

The secondary containment system shall have sufficient capacity to contain: (a) 10% of the volume of all containers and 100% of the volume of the largest single container, whichever is greater, plus (b) the design flow rate of the automatic fire extinguishing system (for 20 minutes) for the area or room in which

the storage is located. If the storage area and/or containment area are open to rainfall, the secondary containment system must also accommodate the volume of a 24-hour rainfall as determined by a 25-year storm frequency. Liquid that accumulates in the secondary containment system shall be removed in as timely a manner as necessary to prevent overflow of the system. Nonhazardous liquids may be drained in accordance with applicable local regulations. If the collected material is a hazardous waste under 40 CFR part 261, it must be managed as a hazardous waste in accordance with all applicable requirements of parts 262-266 of that regulation.

Vacuum suction devices, absorbent scavenger materials or other devices approved by the department, shall be present on site or available to facilitate the removal or further containment of a spill. Devices or materials shall be available in sufficient magnitude so as to at least control and collect the total quantity of regulated substances, hazardous waste and petroleum products that the containment system is designed to contain. Emergency containers shall be present and of such capacity as to hold the total quantity of regulated substances plus absorbent material.

3. *Emergency Management Plan.* An emergency plan shall be prepared and filed with the health department, the city's fire and police departments or providers, and the community development department indicating the procedures that will be followed in the event of the release of a regulated substance, hazardous waste or petroleum product so as to control and collect all such spilled material in such a manner as to prevent it from discharging into any storm or sanitary drains or the ground. A facility or property which has had, or appears to have had, unauthorized discharges to soil or ground water shall submit a regulated substances management plan for the facility if required by

the department. The written plan will be used to demonstrate to the department that the facility owner or operator understands the procedures and has the proper equipment to handle regulated substances, hazardous waste and petroleum products within the guidelines of this chapter. The plan may not be implemented without the approval of the department.

4. *Reporting Of Spills.* Any spill of a regulated substance in excess of the nonaggregate quantity thresholds established by the list of hazardous waste (40 CFR part 261, subpart D), and 40 CFR appendix VII-hazardous constituents and EPA designation reportable quantities and notification requirements for hazardous substances under CERCLA (40 CFR 302, effective July 3, 1986), shall be reported by telephone to the city and designated water utility within one hour of discovery of the spill. Cleanup shall commence immediately upon discovery of the spill. A full written report shall be submitted to the public services department and the health department within 15 days after discovery of the spill.

B. Best Management Practices. Under the provisions of this chapter, all persons having control or ownership of potential contamination sources within the city's boundaries shall incorporate and utilize best management practices ("BMPs") in their operations. BMPs that reduce the potential for spills and leaks at a site to occur and enter ground water shall be construed within the context of this chapter to include, but not be limited to, structural and nonstructural practices, conservation practices, and operation and maintenance procedures as specified by the Utah Department of Environmental Quality and the U.S. Environmental Protection Agency. BMPs outlined in appendix B in section 17.30.150 of this chapter supplement those provided in this

subsection. It is the responsibility of the applicant to comply with the most recent, updated version of BMP provisions.

1. *Underground Storage Tanks.* Installation of any new underground storage tanks ("USTs") used to store regulated substances, hazardous waste or petroleum products for either residential or nonresidential activities in recharge areas and protection zones designated pursuant to this chapter, shall require a secondary containment system for the tank and associated underground piping, and an automatic leak detection system. A permit from the Utah Division of Environmental Remediation and Response shall be required for the removal or closure of USTs. The permit shall require that leaking tanks be pumped dry and removed from the ground by a state licensed company. If removal of the UST(s) is not feasible, the lines shall be disconnected and capped and the tank shall be filled with an inert substance such as washed sand. Best management practices implementation is required for all USTs.

2. *Septic Tank Systems.* No person may place, maintain or operate on site sewage disposal from a septic tank within the primary recharge area, zone 1, zone 2, or within 300 feet of any public street in which a public sewer is laid. Septic systems in zones 3 and 4 shall comply with the Utah Department of Health "care of waste disposal regulations", part IV and part V. Nonresidential activities which have septic tank systems shall have installed a four inch diameter vertical pipe and shall be located in a manner which will permit ready access by department personnel to extract representative samples to check for improper or unauthorized disposal of regulated substances, hazardous waste or petroleum products. A septic holding tank that does not discharge into the soil is preferred. The contents of a septic holding tank are

removed, and can be treated or disposed of at an appropriate facility. No new septic tank may be installed within 300 feet of any public sewer.

3. *Sewage Collection, Transmission and Disposal.* No person may discharge treated or untreated sewage in any area not specifically designated for that purpose by the department. The owner or operators of any wastewater treatment plant, sanitary sewer, force main, gravity sewer, or lateral shall notify the department within 24 hours after discovering a break that may or does result in the leakage of sewage. Emergency telephone numbers will be prominently displayed on all sewage lift stations within zones 1, 2, 3, 4, and the primary recharging area. All leaking sewage collection and transmission pipes shall be promptly repaired or replaced. New sewage collection and transmission pipes shall be installed according to acceptable construction standards, as determined by the Utah Department of Environmental Quality and the city, and shall have routine inspections during and after construction. The placement or operation of a wastewater treatment plant within zone 1 or 2 is strictly forbidden.

4. *General Storm Water Management.* All storm water management systems to be constructed and implemented for facilities within the protection zones and recharge areas shall obtain permits in accordance with applicable local, state, and federal laws and regulations.

5. *Deicing Salt Storage and Application.* Deicing salt shall be stored on an impermeable pad and shall be covered. Deicing salt application shall use best management practices and shall evaluate substitute products and technologies.

6. *Landfills.* Expansion or creation of new landfills is prohibited in the primary recharge

area and zone 1 and zone 2. Existing landfills in the primary recharge area or in protection zone 1 shall be required to comply with the provisions of Utah Administrative Code R315-301-1 through 301-5. Landfills shall develop and implement a landfill monitoring program. The monitoring shall include the vadose zone and ground water. If the monitoring detects contamination, the following corrective measures may be required:

(a) Landfill: Cover the landfill with suitable low permeability materials and minimize the application of supplemental water to reduce infiltration of moisture.

(b) Ground Water Containment: Install ground water containment and treatment actions, additional monitoring and erosion controls as required.

(c) Environmental Quality Monitoring: Facilities which have had, or appear to have had, unauthorized releases to soil or ground water shall be required by the department to monitor soil and ground water in and adjacent to the facility. At the request of the department, the facility shall submit a monitoring plan for department review. The plan shall be implemented with the approval of the department. Facilities that undergo closure may be required to monitor soil and ground water in and adjacent to the facility subject to closure. All costs associated with the closing and monitoring of the site will be paid for by the operator of the facility.

#### **17.30.110 Exclusions and exemptions.**

A. Qualifying Statement. The exclusions and exemptions contained in this section shall not apply to protection zone 1.

B. Exclusions and Exemptions. The following substances are not subject to the provisions of this chapter, provided that these

substances are handled, stored and disposed of in a manner that does not result in an unauthorized release or cause contamination of the ground water:

1. Regulated substances stored at residences that do not exceed ten pounds (dry) or five gallons (liquid) (except as allowed in subsection B3 of this section) and used for personal, family or household purposes;

2. Commercial products limited to use at the site solely for office or janitorial purposes when stored in total quantities of less than 50 pounds (dry) or 55 gallons (liquid);

3. Prepackaged consumer products available through retail sale to individuals for personal, family or household use, that are properly stored;

4. Water based latex paint;

5. Fertilizers, treated seed (except as noted in this chapter), pesticides, herbicides, erosion control products and soil amendment, quantities normally available at retail outlets, when stored, handled and applied in accordance with the manufacturer's instructions, label directions and nationally recognized standards;

6. Compressed gases;

7. Substances or mixtures which may pose a hazard but are labeled pursuant to the federal food, drug and cosmetic act; and

8. Substances which, in the judgment of the director, pose no hazard to ground water.

C. Continuous Transit. The transportation of any regulated substance(s) through any protection zone or recharge area is allowed, provided that the transporting vehicle is in continuous transit.

D. Vehicular and Lawn Maintenance Fuel and Lubricant Use. The use of any petroleum product solely as an operational fuel in the vehicle or lawn maintenance fuel tank or as a lubricant in such a vehicle shall be exempt from the provisions of this chapter. These spent products shall be properly disposed of in compliance with applicable federal, state and local regulations.

#### **17.30.120 Enforcement, violations and penalties--Civil.**

A. Notification of Violation. If the director finds that any regulated person has violated or is violating any provision of this chapter, or any order, rule or regulation issued or promulgated hereunder, the director may serve upon that person a written notice of violation. Such written notice shall be served in person or by certified mail, return receipt requested. Within five days after the receipt of such notice, an explanation for the violation and a plan for the satisfactory correction and prevention thereof, which shall include specific required actions, shall be submitted by the regulated person to the director. Submission of this plan in no way relieves the regulated person of liability for any violations occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the city to take any action including emergency actions or any other enforcement action, without first issuing a notice of violation.

B. Consent Orders. The director is hereby empowered to enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any regulated person responsible for noncompliance. Such orders will include specific action to be taken by the regulated person. Consent orders shall be judicially enforceable.

C. Order To Show Cause Hearing. The director may order any regulated person which causes or contributes to violation(s) of any provisions of this chapter, or any order, rule or regulation issued or promulgated hereunder, to appear before the director and show cause why a proposed enforcement action should not be taken. Notice shall be served on the regulated person, which notice shall specify the time and place for the hearing, the proposed enforcement action, the reasons for such action, and a request that the regulated person show cause why this proposed enforcement action should not be taken. Such written notice shall be served in person on any authorized representative of the regulated person, or by certified mail, return receipt requested, at least seven days prior to the hearing. Whether or not the regulated person appears as ordered, immediate enforcement action may be pursued following the hearing date. A show cause hearing shall not be a prerequisite for taking any other actions against the regulated person.

D. Compliance Orders. If the director finds that a regulated person has violated or continues to violate any provision of this chapter, or any rule or regulation issued or promulgated hereunder, the director may issue an order to the regulated person responsible for the violation directing that the regulated person come into compliance within 30 days. If the regulated person does not come into compliance within 30 days, any and all available remedies may be pursued, including, if necessary to prevent an actual or imminent discharge which may contaminate the ground water, discontinuing water and/or water service to the regulated person as provided in subsection F of this section. Compliance orders may also contain other requirements to address noncompliance, including additional self-monitoring and management practices designed to minimize the amount of pollutants released. A compliance order may not extend

the deadline for compliance established for a federal standard or requirement, nor does a compliance order release the regulated person of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a prerequisite to taking any other action against the regulated person.

E. Cease and Desist Orders. If the director finds that a regulated person is violating any provision of this chapter, any rule or regulation issued or promulgated hereunder, or that the regulated person's past violations are likely to recur, the director may issue an order to the regulated person directing it to cease and desist all such violations and directing the regulated person to:

1. Immediately comply with all requirements; and

2. Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation. Issuance of a cease and desist order shall not be a prerequisite to taking any other action against the regulated person.

F. Emergency Suspension of Utility Service. The director may order the immediate shutoff of affected utilities and suspension of a regulated person's actions (after informal notice to the regulated person), whenever such suspension or shutoff is necessary in order to stop an actual or threatened discharge which reasonably appears to present or cause a risk of an imminent or substantial endangerment to the ground water or the health or welfare of the city's culinary water customers. Any regulated person notified of a suspension of its activities shall immediately stop conducting such activities. If a regulated person fails to immediately comply voluntarily with the suspension order, the director shall take such steps as deemed necessary to enforce such order. The director shall allow the regulated

person to recommence operations when the regulated person has demonstrated to the satisfaction of the director that the period of endangerment has passed. A regulated person that is responsible, in whole or in part, for any discharge presenting imminent endangerment, shall submit to the director a detailed written statement describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, prior to the date of any show cause hearing under this section, if applicable. Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

G. Injunctive Relief. If a regulated person has violated or continues to violate a provision of this chapter or continues to violate any order, rule or regulation issued or promulgated hereunder, the city may petition any court of competent jurisdiction for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the ordinance provision, order, rule, regulation or other requirement. In addition, the city may recover reasonable attorney fees, court costs, and other expenses of litigation by appropriate legal action against the regulated person found to have violated any provision hereof, or of any order, or any other rule or regulation issued or promulgated hereunder. Such other action as appropriate for legal and/or equitable relief may also be sought by the city. A petition for injunctive relief need not be filed as a prerequisite to taking any other action against a regulated person.

H. Civil Fine Pass Through Recovery. If a regulated person releases such pollutants which cause the city to violate any applicable laws, rules or regulations to which the city is subject, and the city is fined or held liable regarding such violations, the regulated person shall be fully liable for the total amount of the fines and civil penalties assessed against the



city and any administrative costs incurred. The city may commence a civil proceeding to collect amounts due the city under this subsection.

I. Public Nuisances. A violation of the provisions of this chapter, or of any order, rule or regulation issued or promulgated hereunder, is hereby declared a public nuisance and shall be corrected or abated as directed by the director. A person(s) creating a public nuisance shall be subject to the provisions of applicable laws governing nuisances, including reimbursement to the city for any costs incurred in removing, abating or remedying the nuisance.

J. Enforcement By Other Agencies. The city may request the health department, and the health department is hereby granted the authority upon such request, to enforce or administer the provisions of this chapter and to prosecute any violations thereof. To the extent of any such request, references in this chapter to the department and the city shall be deemed to mean the health department, and references in this chapter to the director shall be deemed to mean the director of the health department. In addition, the city may refer to the state of Utah or the federal government, for civil or criminal prosecution, any violations of this chapter which also violate applicable provisions of state or federal law, orders, administrative rules or permits. It is the intent of the city that this chapter shall be construed to the greatest extent possible to be consistent with the provisions of applicable county, state and federal laws, ordinances, rules, regulations and permits. In the event of a conflict, the more restrictive provisions shall apply.

K. Nonexclusive Remedies. The provisions of subsections A through J of this section are not exclusive remedies. The city reserves the right to take any, all, or any

combination of these actions against a regulated person as circumstances warrant. The city is empowered to take more than one enforcement action against a regulated person for each separate violation of this chapter, which actions may be taken concurrently. Each day a violation of this chapter continues is deemed to be a separate violation.

#### **17.30.130 Inspection authority.**

A. When necessary to make an inspection to enforce any of the provisions of this chapter, or when the director has reasonable cause to believe that there exists upon any property or on or in any facility located thereon any condition which violates this chapter, the director is authorized to enter such property or facility during normal business hours in the case of a business or commercial use, or in the case of a residential property or facility, during daylight hours, to inspect the same or to perform any duty authorized by this chapter; provided that if such property or facility is occupied, the director shall first present credentials and demand entry; and if such property or facility is unoccupied, the director shall first make a reasonable effort to locate the owner or other persons having charge or control of the property or facilities and demand entry. If entry is denied, the director shall have recourse to every remedy provided by law to obtain entry.

B. If the owner or occupant denies entry, the director is authorized to obtain an administrative search warrant or other warrant provided by law to obtain entry. Owners, occupants or any other persons having the charge, care or control of property or facilities shall, after proper request is made as provided herein, promptly admit the director for the purpose of inspection pursuant to this chapter.

#### **17.30.140 Criminal penalty.**

A regulated person who fails to do an act required by this chapter or who commits an act which is prohibited by this chapter is guilty of a class B misdemeanor. Each day a violation is committed or permitted to continue constitutes a separate violation.

**17.30.150 Appendices.**

**A. Appendix A--Generic  
Regulated Substance List.**

Acid and basic cleaning solutions

Animal dips

Antifreeze and coolants

Arsenic and arsenic compounds

Battery acids

Bleaches and peroxide

Brake and transmission fluid

Brine solution

Casting and foundry chemicals

Caulking agents and sealants

Cleaning solvents

Corrosion and rust preventatives

Cutting fluids

Degreasing solvents

Disinfectants

Dyes

Electroplating solutions

Engraving and etching solutions

Explosives

Fertilizers

Fire extinguishing chemicals

Food processing wastes

Formaldehyde

Fuels and additives

Glues, adhesives and resins

Greases

Hydraulic fluid

Indicators

Industrial and commercial janitorial  
supplies

Industrial sludges and stillbottoms

Inks, printing, and photocopying  
chemicals

Laboratory chemicals

Liquid storage batteries

Medical, pharmaceutical, dental,  
veterinary, and hospital solutions

Mercury and mercury compounds

Metal finishing solutions

Oils

Painting solvents

Paints, primers, thinners, dyes, stains,  
wood preservatives, varnishing and cleaning  
compounds

Pesticides and herbicides

Photo development chemicals

Plastic resins, plasticizers and catalysts

Poisons

Polishes

Polychlorinated biphenyls (PCBs)

Pool chemicals

Processed dust and particulates

Radioactive sources

Reagents and standards

Refrigerants

Roofing chemicals and sealers

Sanitizers, disinfectants, bactericides, and algacides

Soaps, detergents and surfactants

Solders and fluxes

Stripping compounds

Tanning industry chemicals

Transformer and capacitor oils and fluids

Wastewater

Water and wastewater treatment chemicals

B. Appendix B--List Of Potential Contamination Sources And Best Management Practices. The following table identifies uses which have varying potentials to contaminate ground water sources. These uses have been classified according to the risk of contamination in each protection zone as follows:

*Permitted Uses (P):* The risk of contamination is considered relatively low in the specified zone if regulatory requirements and best management practices are implemented and, therefore, the use is permitted if it otherwise conforms to the city's zoning ordinance, title 19 of this code.

*Restricted Uses (R):* The risk of contamination is moderate in the specified

zone. The Utah Division of Drinking Water Quality shall first review all conditional use requests. The use may then be permitted only after conditional use review and approval by the planning commission if the use otherwise conforms to the zoning ordinance, title 19 of this code. Approval is subject to implementation of best management practices and compliance with other reasonable conditions as may be established by the planning commission.

*Prohibited Uses (X):* The risk of contamination is very high in the specified zone. The use is not permitted regardless of any other provision of the city's zoning ordinance, title 19 of this code.

*Storm Water: R-317-8-3.8(1)(a)*  
*Pretreatment:* Contact local wastewater plant, Central Valley water reclamation facility.

TABLE 1

MATRIX FOR POTENTIAL CONTAMINATION SOURCES

Potential Contamination Sources	Protection Zone			
	Primary Recharge	Secondary Recharge	Zone 1	Zone 2
Abandoned wells (state rule R655-4, 12.1 to 12.2 for requirements to abandoned wells)	X	X	X	X
Agricultural pesticide, herbicide, and fertilizer storage, use, filling, and mixing areas FIFRA - 40 CFR	R	R	X	R

152-156, 157/RCRA subtitle C/Utah pesticide control act BMP - department of agriculture				(more than 10 animal units) (UPDES, R-317-8)					
Airport	R	R	X	Dealership	R	R	X	R	
maintenance and fueling sites (storm water UST)				maintenance departments					
Appliance repair	R	R	X	RCRA - C/UST pretreatment)					
(RCRA subtitle C)				Auto body					
Auto operations	R	R	X	Engine repair					
and fleet vehicle				Oil and lube					
maintenance				shops					
facilities				(used oil UAC					
(commercial)(BMP				R315-15)					
- SL Co. health)				Rustproofing					
				Tire					
				Vehicle rental					
				with maintenance					
Beauty salons	R	P	X	Dry cleaners (with	R	R	X	X	
Boat building and	R	P	X	on site chemicals)					
refinishing (RCRA				RCRA subtitle C,					
subtitle C)				pretreatment/SL					
Car washes	R	P	X	Co. BMP)					
Pretreatment				Dry cleaners	P	P	X	P	
contact				(without on site					
Local planning				chemicals)					
department				Dump sites (used	X	R	X	R	
Cemeteries, golf	R	R	X	oil R315-15, solid					
courses, parks, and				and hazardous -					
plant nurseries				RCRA subtitle C)					
(FIFRA)				Embalming	R	R	X	R	
Chemical	R	R	X	services					
reclamation				pretreatment)					
facilities (RCRA				Farm operations	R	R	X	R	
subtitle G)				Food processing,	R	R	X	X	
Chemigation wells	R	R	X	meatpacking, and					
(UIC)				slaughterhouses					
Concrete, asphalt,	R	R	X	(UPDES, R-317-8,					
and tar companies				pretreatment)					
Dairy farms and	R	R	X	Fuel, oil, and	X	R	X	R	
animal feedlots				heating oil					
				distribution and					

storage facilities (section 17.30.100 of this chapter)				Junk and salvage yards (SL Co. BMP)	X	R	X	R
Furniture stripping, R painting, and finishing businesses (RCRA, subtitle C)	R	R	X	Landfills and transfer stations (UDSW, solid waste rules R315- 301-320; section 17.30.100 of this chapter; RCRA subtitle D)	X	R	X	R
Gasoline service R stations (including underground storage tanks) (local zoning and land regulations; UST guidelines)	R	R	X	Laundromats (pretreatment)	R	P	X	P
Hospitals and R medical, dental, and veterinary offices (solid and hazardous)	R	R	X	Machine shops, metal plating, heat treating (pretreatment, RCRA)	X	R	X	R
Industrial X manufacturers of: chemicals, pesticides, herbicides, paper products, leather products, textiles, rubber, plastic, fiberglass, silicone, glass, pharmaceuticals, and electrical equipment, etc. (section 17.30.100 of this chapter - FIFRA + RCRA subtitle C)	X	R	X	Maintenance garages (used oil, RCRA subtitle C)	R	R	X	R
Industrial waste X disposal impoundment areas (GWR-317- 6, RCRA subtitle C)	X	R	X	Manure piles (GW R-317-8, (UPDES, feet)	R	R	X	X
				Mining operations radiological (UAC GW R317-6, UAC R313-25)	R	R	X	P
				Municipal wastewater treatment plants (UDWQ, design requirements for wastewater collection, treatment, and disposal systems, UAC, R317-3)	R	R	X	X
				Photo processing and print shops (pretreatment)	R	R	X	R
				Railroad yards	R	P	X	P

Residential pesticide, herbicide, and fertilizer storage, use, filling, and mixing areas (follow manufacturer's directions for use and storage)

Residential  
underground  
storage tanks  
(UAC R311-203,  
205, 206)

RV waste disposal stations (UAC R392)

Salt and salt-sand R  
piles (section  
17.30.100 of this  
chapter,  
DEQ/UDOT BMP)

Sand and gravel excavation and processing (const UAC R317-1)

Septic tank drain field systems (UDWQ, design requirements for wastewater collection, treatment, and disposal system, UAC, R317-3)

Storm water                      R  
detention basin and  
snow storage sites

Toxic chemical storage and oil X

P

R

R

R

P

R

R

X

X

X

X

X

X

X

X

X

pipelines (section 17.30-100 of this chapter)

Wood preservative X  
treatment facilities

Notes:

UAC: Utah Administrative Code

UDDWQ: Utah Division of Drinking  
Water Quality

<sup>P</sup>  
UDOGM: Utah Division of Oil, Gas,  
and Mining

UDSW: Utah Division of Solid  
Waste

RCRA: Resource Conservation and Recovery Act

C. Appendix C--Recharge Area And Protection Map. See map on file in the city's offices.

P P

$$\mathbf{X} \quad \mathbf{R}$$

R      P

X X

**Chapter 17.32**

**FLOOD DAMAGE PREVENTION**

**[See attached exhibit entitled “Flood  
Damage Prevention Ordinance”]**

## Chapter 17.34

### VIOLATIONS AND PENALTIES

#### Sections:

- 17.34.010**     **Violations.**
- 17.34.020**     **Penalties.**
- 17.34.030**     **Additional sanctions against business entity.**
- 17.34.040**     **Removal of obstruction.**

#### **17.34.010**     **Violations.**

It is unlawful for any person, entity or private or governmental instrumentality to violate any of the provisions of this title, or to aid or cause the violation of any of said provisions.

#### **17.34.020**     **Penalties.**

A. Any person who is convicted of violating any of the provisions of any chapter of this title for which a penalty is not specified in such chapter shall be guilty of a class C misdemeanor, with each day such violation is committed or permitted to continue constituting (and punishable as) a separate offense.

B. In addition to criminal fines and/or penalties for violations of this title, if the city or any other party suffers damages or is required to make repairs and/or replace materials due to such violation, the full cost of such repair and/or replacement shall be borne by the violator.

C. In addition to the criminal and civil penalties hereinbefore provided, any condition caused or permitted to exist in violation of any of the provisions of this title shall be considered a threat to the public health, safety, welfare and the environment, and may be (1) declared and deemed a nuisance by the manager, the director or their designee, and (2) summarily abated and/or restored by the city, and/or (3) the subject of civil action taken to

abate, enjoin or otherwise compel the cessation of such nuisance.

#### **17.34.030**     **Additional sanctions against business entity.**

A. When a corporation, limited partnership, limited liability company, trust or other business entity or association is convicted of violating any of the provisions of this title, the court may, in addition to or in lieu of imposing other authorized penalties, require the entity to give appropriate publicity of the conviction by notice to the class or classes of persons or sections of the public interested in or affected by the conviction, by advertising in designated areas, or by designated media or otherwise.

B. When an executive or high managerial officer of a business entity is convicted of a violation of any of the provisions of this title, committed in furtherance of the affairs of the entity, the court may include in the sentence an order disqualifying that person from exercising similar functions in the same or other business entities for a period not exceeding five years if it finds the scope or willfulness of his illegal actions make it dangerous or inadvisable for such functions to be entrusted to him.

#### **17.34.040**     **Removal of obstruction.**

In addition to any penalties which may be imposed pursuant to this chapter, the department may do the following:

A. Remove any obstructions, pipelines or other devices installed in violation thereof; and/or

B. Give written notice to persons in violation of the provisions of this title requiring the removal of offending installations from natural channels or other storm drainage facilities. Notices may be personally served or may be mailed to violators by certified mail provided that a copy is also posted on offending installations for a



period of ten days. If such installations are not removed within ten days after notice is given, the department may effect removal at the expense of the person in violation and may recover its costs and expenses (including attorneys fees) therefore; and/or

C. Bring an action for the abatement of the nuisance caused by the offending installation, or for the recovery of the city's costs and expenses (including attorneys fees) incurred in removing the offending installation pursuant to subsections A or B of this section.



**Chart 17.28.050**

**STORM WATER FACILITIES  
SUMMARY OF FEE CALCULATION**

<b>LAND USE</b>	<b>FEE BASIS UNIT</b>	<b>FEE</b>
<b>RESIDENTIAL (Single Family)</b>	Per Dwelling Unit	
Rural Density (Lot ½ acre or larger)		\$1,489.88
Low Density (Lot 1/4 acre – under ½ acre)		\$1,053.19
Medium Density (Lot 1/8 acre – under 1/4 acre)		\$642.19
<b>RESIDENTIAL (Multi-Family)</b>	Per Acre of Impervious Surface (Prorated)	
High Density (24 Units/Acre)		\$642.19
Mixed Use (8 Units/Acre)		\$642.19
<b>COMMERCIAL</b>	Per Acre of Impervious Surface (Prorated)	
Civic		\$642.19
Commercial		\$642.19
Neighborhood Commercial		\$642.19
O-R-D		\$642.19
Open Space		\$642.19
Open Space – Reserved		\$642.19
Religious		\$642.19
Street ROW		\$642.19
Utility		\$642.19

For purposes of this chapter, “impervious surfaces” shall include rooftops, asphalt, concrete, and other essentially non-porous materials located on a site which prevent direct passage of water into underlying soil, as reasonably determined by the city.

## **EXHIBIT**

### **Chapter 17.32**

#### **FLOOD DAMAGE PREVENTION ORDINANCE**

##### **ARTICLE I**

##### **STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND METHODS**

###### **SECTION A. STATUTORY AUTHORIZATION**

The Legislature of the State of Utah has in Utah Code Annotated 10-8-84 delegated the responsibility of local governmental units to adopt regulations designed to minimize flood losses. Therefore, the City Council of Cottonwood Heights, Utah, does ordain as follows:

###### **SECTION B. FINDINGS OF FACT**

(1) The flood hazard areas of Cottonwood Heights, Utah are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.

(2) These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazards areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, floodproofed or otherwise protected from flood damage.

###### **SECTION C. STATEMENT OF PURPOSE**

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

1. Protect human life and health;
2. Minimize expenditure of public money for costly flood control projects;
3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. Minimize prolonged business interruptions;
5. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;

6. Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
7. Insure that potential buyers are notified that property is in a flood area.

#### **SECTION D. METHODS OF REDUCING FLOOD LOSSES**

1. In order to accomplish its purposes, this ordinance uses the following methods:
2. Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities;
3. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
4. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of flood waters;
5. Control filling, grading, dredging and other development which may increase flood damage;
6. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

### **ARTICLE II**

#### **DEFINITIONS**

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

**ALLUVIAL FAN FLOODING** - means flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

**APEX** - means a point on an alluvial fan or similar landform below which the flow path of the major stream that formed the fan becomes unpredictable and alluvial fan flooding can occur.

**AREA OF SHALLOW FLOODING** - means a designated AO, AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent chance or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

**AREA OF SPECIAL FLOOD HAZARD** - is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

**BASE FLOOD** - means the flood having a one percent chance of being equaled or exceeded in any given year.

**BASEMENT** - means any area of the building having its floor sub-grade (below ground level) on all sides.

**CRITICAL FEATURE** - means an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

**DEVELOPMENT** - means any man-made change in improved and unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

**ELEVATED BUILDING** - means a non-basement building (i) built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zones V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In the case of Zones V1-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls met the standards of Section 60.3(e)(5) of the National Flood Insurance Program regulations.

**EXISTING CONSTRUCTION** - means for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

**EXISTING MANUFACTURED HOME PARK OR SUBDIVISION** - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

**EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION-**

Means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**FLOOD OR FLOODING** - means a general and temporary condition of partial or complete inundation of normally dry land areas from:

1. the overflow of inland or tidal waters.
2. the unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD INSURANCE RATE MAP (FIRM)** - means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

**FLOOD INSURANCE STUDY** - is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, water surface elevation of the base flood, as well as the Flood Boundary-Floodway Map.

**FLOODPLAIN OR FLOOD-PRONE AREA** - means any land area susceptible to being inundated by water from any source (see definition of flooding).

**FLOODPLAIN MANAGEMENT** - means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works and floodplain management regulations.

**FLOODPLAIN MANAGEMENT REGULATIONS** - means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

**FLOOD PROTECTION SYSTEM** - means those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. These specialized flood modifying works are those constructed in conformance with sound engineering standards.

**FLOOD PROOFING** - means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**FLOODWAY (REGULATORY FLOODWAY)** - means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**FUNCTIONALLY DEPENDENT USE** - means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

**HIGHEST ADJACENT GRADE** - means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

**HISTORIC STRUCTURE** - means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  - a) by an approved state program as determined by the Secretary of the Interior or;
  - b) directly by the Secretary of the Interior in states without approved programs.

**LEVEE** - means a man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

**LEVEE SYSTEM** - means a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

**LOWEST FLOOR** - means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; **provided** that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

**MANUFACTURED HOME** - means a structure transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a



"recreational vehicle".

**MANUFACTURED HOME PARK OR SUBDIVISION** - means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**MEAN SEA LEVEL** - means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

**NEW CONSTRUCTION** - means, for the purpose of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

**NEW MANUFACTURED HOME PARK OR SUBDIVISION** - means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by a community.

**RECREATIONAL VEHICLE** - means a vehicle which is:

1. built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projections;
3. designed to be self-propelled or permanently towable by a light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**START OF CONSTRUCTION** - (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**STRUCTURE** - means a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

**SUBSTANTIAL DAMAGE** - means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT** - means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before "start of construction" of the improvement. This includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary conditions or
2. Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure."

**VARIANCE** - is a grant of relief to a person from the requirement of this ordinance when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this ordinance. (For full requirements see Section 60.6 of the National Flood Insurance Program regulations.).

**VIOLATION** - means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

**WATER SURFACE ELEVATION** - means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

### ARTICLE III

#### GENERAL PROVISIONS

##### **SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES**

The ordinance shall apply to all areas of special flood hazard within the jurisdiction of Cottonwood Heights, Utah.

##### **SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD**

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled, "The Flood Insurance Study for Salt Lake County (the area comprising Cottonwood Heights), Utah," dated September 21, 2001, with accompanying Flood

Insurance Rate Maps and Flood Boundary-Floodway Maps (FIRM and FBFM) and any new/revised FEMA Firm maps as they become available and are adopted by FEMA, the city of Cottonwood Heights, Utah will automatically recognize and adopt said maps without requiring the passage of additional ordinances by the city.

#### **SECTION C. ESTABLISHMENT OF DEVELOPMENT PERMIT**

A Development Permit shall be required to ensure conformance with the provisions of this ordinance.

#### **SECTION D. COMPLIANCE**

No structure or land shall hereafter be located, altered, or have its use changed without full compliance with the terms of this ordinance and other applicable regulations.

#### **SECTION E. ABROGATION AND GREATER RESTRICTIONS**

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

#### **SECTION F. INTERPRETATION**

In the interpretation and application of this ordinance, all provisions shall be:

1. considered as minimum requirements;
2. liberally construed in favor of the governing body; and
3. deemed neither to limit nor repeal any other powers granted under State statutes.

#### **SECTION G. WARNING AND DISCLAIMER OR LIABILITY**

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. On rare occasions greater floods can and will occur and flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the community or any official or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

### **ARTICLE IV**

#### **ADMINISTRATION**

#### **SECTION A. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR**

The City Floodplain Manager is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (National Flood Insurance Program Regulations) pertaining to floodplain management.

## **SECTION B. DUTIES & RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR**

Duties and responsibilities of the Floodplain Administrator shall include, but not be limited to, the following:

1. Maintain and hold open for public inspection all records pertaining to the provisions of this ordinance.
2. Review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding.
3. Review, approve or deny all applications for development permits required by adoption of this ordinance.
4. Review permits for proposed development to assure that all necessary permits have been obtained from those Federal, State or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
5. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the necessary interpretation.
6. Notify, in riverine situations, adjacent communities and the State Coordinating Agency which is the Utah State Engineers Office, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
7. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
8. When base flood elevation data has not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a Federal, State or other source, in order to administer the provisions of Article 5.
9. When a regulatory floodway has not been designated, the Floodplain Administrator must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

10. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one foot, provided that the community **first** applies for a conditional FIRM revision through FEMA (Conditional Letter of Map Revision).

### **SECTION C. PERMIT PROCEDURES**

Application for a Development Permit shall be presented to the Floodplain Administrator on forms furnished by him/her and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

1. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures;
2. Elevation in relation to mean sea level to which any nonresidential structure shall be floodproofed;
3. A certificate from a registered professional engineer or architect that the nonresidential floodproofed structure shall meet the floodproofing criteria of Article 5, Section B(2);
4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
5. Maintain a record of all such information in accordance with Article 4, Section (B)(1).

Approval or denial of a Development Permit by the Floodplain Administrator shall be based on all of the provisions of this ordinance and the following relevant factors:

1. The danger to life and property due to flooding or erosion damage;
2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
3. The danger that materials may be swept onto other lands to the injury of others;
4. The compatibility of the proposed use with existing and anticipated development;
5. The safety of access to the property in times of flood for ordinary and emergency vehicles;
6. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as

sewer, gas, electrical and water systems;

7. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
8. The necessity to the facility of a waterfront location, where applicable;
9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
10. The relationship of the proposed use to the comprehensive plan for that area.

#### **SECTION D. VARIANCE PROCEDURES**

1. The appeal Board as established by the community shall hear and render judgment on requests for variances from the requirements of this ordinance.
2. The Appeal Board shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Administrator in the enforcement or administration of this ordinance.
3. Any person or persons aggrieved by the decision of the Appeal Board may appeal such decision in the courts of competent jurisdiction.
4. The Floodplain Administrator shall maintain a record of all actions involving an appeal and shall report variances to the Federal Emergency Management Agency upon request.
5. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this ordinance.
6. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in Section C(2) of this Article have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
7. Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this ordinance (Article 1, Section C).
8. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
9. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to

preserve the historic character and design of the structure.

10. Prerequisites for granting variances:

- a) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- b) Variances shall only be issued upon:
  - 1) showing a good and sufficient cause;
  - 2) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and
  - 3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- c) Any application to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

11. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:

- a) the criteria outlined in Article 4, Section D(1)-(9) are met, and
- b) the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

## ARTICLE V

### PROVISIONS FOR FLOOD HAZARD REDUCTION

#### **SECTION A. GENERAL STANDARDS**

In all areas of special flood hazards the following provisions are required for all new construction and substantial improvements:

- 1. All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

2. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
3. All new construction or substantial improvements shall be constructed with materials resistant to flood damage;
4. All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
5. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
6. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into flood waters; and,
7. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

#### **SECTION B. SPECIFIC STANDARDS**

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Article 3, Section B, (ii) Article 4, Section B(8), or (iii) Article 5, Section C(3), the following provisions are required:

1. **Residential Construction** - new construction and substantial improvement of any residential structure shall have the lowest floor (including basement), elevated to or above the base flood elevation. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in Article 4, Section C(1)a., is satisfied.
2. **Nonresidential Construction** - new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement) elevated to or above the base flood level or together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are floodproofed shall be maintained by the Floodplain Administrator.
3. **Enclosures** - new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or



storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

- a) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- b) The bottom of all openings shall be no higher than one foot above grade.
- c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

## **2. Manufactured Homes –**

- a) Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- b) Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- c) Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:
  - 1) the lowest floor of the manufactured home is at or above the base flood elevation, or
  - 2) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately

anchored foundation system to resist flotation, collapse, and lateral movement.

**5. Recreational Vehicles** - Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either:

- a) be on the site for fewer than 180 consecutive days,
- b) be fully licensed and ready for highway use, or
- c) meet the permit requirements of Article 4, Section C(1), and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

**SECTION C. STANDARDS FOR SUBDIVISION PROPOSALS**

- 1. All subdivision proposals including the placement of manufactured home parks and subdivisions shall be consistent with Article 1, Sections B, C, and D of this ordinance.
- 2. All proposals for the development of subdivisions including the placement of manufactured home parks and subdivisions shall meet Development Permit requirements of Article 3, Section C; Article 4, Section C; and the provisions of Article 5 of this ordinance.
- 3. Base flood elevation data shall be generated for subdivision proposals and other proposed development including the placement of manufactured home parks and subdivisions. 18 which is greater than 50 lots or 5 acres, whichever is lesser, if not otherwise provided pursuant to Article 3, Section B or Article 4, Section B (8) of this ordinance.
- 4. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- 5. All subdivision proposals including the placement of manufactured home parks and subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

**SECTION D. STANDARDS FOR AREAS OF SHALLOW FLOODING (AO/AH ZONES)**

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of 1 to 3 feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- 1. All new construction and substantial improvements of **residential** structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as

high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified).

2. All new construction and substantial improvements of **non-residential** structures;
  - a) have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two feet if no depth number is specified), or;
  - b) together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
3. A registered professional engineer or architect shall submit a certification to the Floodplain Administrator that the standards of this Section, as proposed in Article 4, Section C (1)a., are satisfied.
4. Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide flood waters around and away from proposed structures.

#### **SECTION E. FLOODWAYS**

Floodways - located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

1. Encroachments are prohibited, including fill, new construction, substantial improvements and other development within the adopted regulatory floodway *unless* it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
2. If Article 5, Section E (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.
3. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Regulations, a community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community **first** applies for a conditional FIRM and floodway revision through FEMA.

## ARTICLE VI

### CERTIFICATION

It is hereby found and declared by Cottonwood Heights, Utah that severe flooding has occurred in the past within its jurisdiction and will certainly occur within the future; that flooding is likely to result in infliction of serious personal injury or death, and is likely to result in substantial injury or destruction of property within its jurisdiction; in order to effectively comply with minimum standards for coverage under the National Flood Insurance Program; and in order to effectively remedy the situation described herein, it is necessary that this ordinance become effective immediately.

Therefore, an emergency is hereby declared to exist, and this ordinance, being necessary for the immediate preservation of the public peace, health and safety, shall be in full force and effect from and after its passage and approval.

## ARTICLE VII PENALTY CLAUSE

In accordance with Section 59.2(b) of CFR 44, Chapter 1, of the National Flood Insurance Program (NFIP) regulation, to qualify for the sale of federally-subsidized flood insurance, Cottonwood Heights must adopt floodplain management regulations that meet or exceed the minimum standards of Section 60. "These regulations must include effective enforcement provisions."

In accordance with Section 60.1(b) of CFR 44, Chapter 1, of the NFIP regulations, "These regulations must be legally-enforceable, applied uniformly throughout the City of Cottonwood Heights to all privately and publicly owned land within flood-prone (i.e. mudflow) or flood-related erosion areas, and the community must provide that the regulations take precedence over less restrictive conflicting local laws, ordinances or codes."

### PENALTIES FOR NONCOMPLIANCE

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements may, upon conviction thereof be fined not more than \$ 10,000,000 or be imprisoned for not more than 60 days, or both, for each violation, and in addition shall be liable for all costs and expenses associated with the case. Nothing herein contained shall prevent the city of Cottonwood Heights, Utah from taking such other lawful action as is necessary to prevent or remedy any violation.

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